PERFORMANCE AUDIT REPORT

SANTA CLARA VALLEY WATER DISTRICT

FLOOD CONTROL PROGRAM

Prepared by: The Harvey M. Rose Accountancy Corporation

February, 1998

Santa Clara Valley Water District

MEMORANDUM

FC 14A (06-28-93)

TO: Board of Directors

FROM: Stanley M. Williams

SUBJECT: Response to Harvey Rose Accountancy Corporation Performance Audit of Flood Control Program

DATE: March 3, 1998

In January 1997 the Harvey M. Rose Accountancy Corporation was retained by the Board of Directors to perform a performance audit of the District's flood control program. Working closely with the Board Audit Committee, auditors from Harvey Rose met extensively with District staff to compile the comprehensive information necessary to draw the conclusions required of a performance audit. The auditors also interviewed members of the five Flood Control Zone Advisory Committees, representatives from the regulatory agencies and the environmental community, and solicited information from other flood control agencies throughout the state.

The final audit report, completed in February 1998, focuses on the benefit assessment program and related capital construction projects during the period 1981-1996. The performance audit and findings were received by the District staff as encouraging support for many of the efforts undertaken in the past four years. Improvements to the budget, project definition, capital improvement planning, project management and reporting systems appear to be initiatives that are heading in the right direction. Sometimes these changes have been viewed as diverting efforts from our important technical work and have been met with some resistance by staff. This independent report validates how important these type of changes can be in the development of a successful program.

Other findings and recommendations in this report confirm the importance of the discussions the Board has had regarding re-examination of our mission as it relates to the environment and how we interact with the cities and communities we serve. The analysis of future funding and funding options, particularly securing a long-term funding source and implementing ordinance administration fees, will be incorporated into the work of the Comprehensive Flood Management Project team. Other findings, especially those regarding the makeup of and interaction with the Zone Advisory Committees, will be extremely helpful in defining our flood management efforts in the future.

The report acknowledges that increasingly stringent federal and state environmental regulatory requirements and modifications to project design to reflect changing community concerns were the primary contributing factors to project delays or cost increases. However, the auditors found it very difficult to evaluate the performance of the District relative to the program that had been voted on in 1982, 1986 and 1990. The very large scale approach of the program with hundreds of individual projects made any type of comparison of project schedules and costs very difficult. The auditor was able to combine a number of projects into larger scale projects and evaluate those, but again the size and scale of this type of work, the various funding sources to pay for the work and the way the projects were tracked and accounted, all made it extremely difficult to perform a project-by-project analysis. The auditors also found that a comparative evaluation based upon the efforts of other similar flood control agencies was problematic in that there were so many differences in the approaches and the way programs had been defined.

Staff believes that despite the problems inherent in this type of program evaluation, the report raises several policy considerations that the Board may want to consider in reviewing the District's 1981-96 flood control efforts. From the view of the staff there are several important Board policy directives that helped to guide and define the flood control program. Those policy directives include:

1. The District should retain flood control responsibilities and find a way to pay for it.

Passage of Proposition 13 in 1978 reduced the District's flood control revenues 58%. Staff believed that the District's existing facilities could not be maintained at that level of funding and that additional flood protection could not be provided. The Board considered several alternative responses, including securing a take over of the program responsibilities by other local or state agencies.

In June of 1981, the Board initiated a benefit assessment program to fund upgraded maintenance and rehabilitation efforts as needed for the continued safe operation of their flood control facilities. A goal of 60% reduction in the 1981 flood damage potential by 1991 was set and that program was approved by the voters in the summer of the next year.

2. Benefit assessments had to be tightly controlled in order to ensure that the program would be accountable to the voters.

Staff had recommended the use of the state benefit assessment authority and had proposed that rates should be increased annually for inflation and increased maintenance costs. The Board applied controls by limiting the benefit assessment program to ten years, with voter approval needed to extend it and by limiting annual increases to 2%. Staff noted that the amount of flood damage reduction achievable -- that is, projects able to be constructed -- was sensitive to cost inflation and that cost increases would increase more than the permitted increases in revenue.

3. The 1982 Benefit Assessment Program was too limited and needed to be changed to accelerate flood damage reduction efforts.

Floods in the early 1980's demonstrated the need for additional program flexibility. Following a Board review of the effectiveness of the program in July 1986, changes were made that were presented and approved by all voters except the North Central Zone.

The changes included setting different rates in each zone, allowing annual assessment rates to be indexed for inflation, providing for use of long-term debt to accelerate capital construction and a longer sunset to the year 2000. The program was also modified to provide a way to raise rates to recover costs of repairs from flood damage during declared disasters.

4. The Benefit Assessment rates are based on providing the minimal amount of additional funds needed to meet the program objectives.

The benefit assessment rates were developed with certain key assumptions built in:

- The flood control zones would receive their pro rata share of the countywide ad valorem tax levy.

- Several of the larger flood protection projects would be developed as partnership projects with the federal and state agencies providing a majority of the funds. Consequently, our cost estimates were for only the local sponsor costs.

These assumptions did not prove to be reliable. The State shifted some of the historic project taxes from the District as well as cities and other special districts, reducing the amount received from property taxes. The assumptions about partnership projects became even more of a problem. The District tracked the estimates of flood damage reduction accomplished by the program for several years. In 1986 it appeared that only a 46% reduction would be achieved by 1991 rather than the goal of 60%. This became part of the rationale for accelerating the program -- that is, to achieve the 60% by 1991 and creating a new goal of achieving 80% by the year 2000. However, the disclaimer to these projections was that the goal was dependent on the success of planned partnership projects, i.e. Guadalupe River, Lower Silver Creek, Upper Penitencia Creek, Coyote Creek, Berryessa Creek, Llagas Creek and Uvas Creek. Delays to these projects had a large impact on realizing the damage reduction goal. For example, over 33% of the damages identified in 1981 was related to these partnership projects.

The impact of the partnership projects not meeting the District's expectations has not only affected our ability to reach program goals, but has also been the major factor in accounting for the costs increases and schedule delays identified in the performance audit. The report identifies several factors that have been associated with project cost increases and delays, however, staff submits that one of the major contributors has been the collapse of state funding support, the redirection of Natural Resource Conservation Service activities and the extraordinary delays inherent in working with the Corps of Engineers.

For the nine partnership projects where the District assumed only a local share cost, this audit report identifies over $300 million of increasing costs. These nine projects and a new partnership project, the Upper Guadalupe project, account for more than one half of the total unfunded flood control projections in this report and for 54% of the total costs (actual expenditures and cost estimates for funded projects and unfunded projects) for the program.

5. Expend funds on providing flood protection and minimize expenditures on work done to obtain regulatory approval.

Staff believes that another policy direction was to expend the maximum dollars on direct flood protection and spend only those funds necessary to receive regulatory approval for other purposes such as environmental mitigation or neighborhood compatibility. This hierarchy of objectives was informally established, but it affected how cost estimates were developed. The audit report identifies this as being an area of some concern in that the cost estimates for projects failed to recognize the true costs of the project and did not provide a good basis for planning the levels of funding necessary to meet all of the objectives that have to be successfully negotiated in developing large-scale public works projects. One of the auditor's recommendation in this area is to keep a better accounting by separating environmental costs, but again the policy question is whether or not accounting for the required mitigation of environmental impacts is an effective way to address environmental issues. This needs to be contrasted to an approach that builds multiple objectives into the actual project. Either method accounts for these costs, but the latter does not put them in a category of being a surcharge applied by other agencies in order for us to do our flood protection work.

These and other policy issues that are brought to light by this performance audit will be important in developing directions for a new program. The completion of the District's first performance audit represents a significant milestone in our ongoing efforts to improve our agency's accountability to our customers. The work done by the Harvey Rose project team and the Board Audit Committee will certainly serve as a model for future performance audit efforts. Staff recommends that the Board accept the Performance Audit of the Flood Control Program.

Stan M Williams

General Manager

Attachment

Santa Clara Valley Water District

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AN EQUAL OPPORTUNITY EMPLOYER

February 25, 1998

Dear Flood Control Zone Advisory Committee Members:

Subject: Flood Control Audit Report

Enclosed for your review is a copy of the final Harvey M. Rose Accountancy Corporation performance audit report regarding the Santa Clara Valley Water District's (District) flood control program. If you are interested in the presentation of the report, including District staff's comments, it is on the agenda of the District's Board of Directors meeting of March 3, 1998.

Sincerely,

P. Kay Whitlock for

Stanley M. Williams
General Manager

Enclosure

TC425 S383P47 1998

Harvey
Rose Accountancy Corporation

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February 25, 1998

Director Larry Wilson, Chair
Director Sig Sanchez
Board of Directors Audit Committee
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686

Dear Director Wilson and Director Sanchez:

Transmitted herewith is our performance audit report concerning the Santa Clara Valley Water District's Flood Control Program. The report presents our findings, conclusions and recommendations developed in accordance with the audit scope and work plan for this engagement.

This report has been subject to extensive review and comment by District management. It is my understanding that the District's General Manager will provide his written comments regarding the performance audit report directly to the Board of Directors, under separate cover.

I would like to thank and acknowledge the many District personnel who participated in the performance audit process. Without their assistance and cooperation, our task would have been extremely difficult.

Sincerely,

Ken Bruce

Ken Bruce
Project Manager

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Introduction and Executive Summary

The Harvey M. Rose Accountancy Corporation was retained by the Santa Clara Valley Water District's Board of Directors to conduct a performance audit of the District's Flood Control Program. The performance audit scope and work plan were defined through negotiation with the District's Board of Directors Audit Committee. The performance audit project began in late January, 1997. Field work for the performance audit was completed in August, 1997 and a partial draft report was provided to the District's Audit Committee and General Manager in September, 1997.

Subsequent work was conducted to complete a survey of comparable flood control agencies in the State of California during the months of October and November, 1997. Although a preliminary telephone survey was performed in the Spring of 1997, the survey questionnaire was not finalized, with District input, and sent to outside agencies until June, 1997. Final responses to the survey questionnaire were not received until late-November, 1997.

This report is comprised of eight sections and three appendices. Section I provides an Inventory of Santa Clara Valley Water District Flood Control Projects for the period 1981-1996. This section is the product of the single largest task of our performance audit work plan.

Sections II through VII of this report present findings, conclusions and recommendations concerning the following subject areas:

Section II: Benefit Assessments (Appendix I provides discussion and impacts of Prop 218);

Section III: Implementing Ordinance Administration Fees;

Section IV: Capital Project Budgeting and Financial Tracking;

Section V: Addressing the Costs of Environmental Regulation to the District;

Section VI: Flood Zone Advisory Committees;

Section VII: Project Status Reporting.

Section VIII and Appendices II and III of this report, provide a discussion, summary and details of our survey of comparable flood control agencies in the State of California.

In February, 1997, the District's Board of Directors authorized staff to proceed with Phase I of a Comprehensive Flood Management Project. Phase I of this project included a needs assessment and problem definition, and determination of the "baseline" programs in all five flood control zones. The Phase I report, which was issued in draft form in January, 1998 also included a review of existing funding sources and other available funding mechanisms for the District's flood management program.

Initially, the performance audit team received future capital improvement cost estimates that were based on a 1995 study performed by the District. In order to provide consistent, and current, estimates of future project costs, we have updated capital cost projections in this report to conform to the District's latest estimates as detailed in the Phase I Comprehensive Flood Management Project draft report.

The remainder of this Introduction and Executive Summary provides a digest of the Performance Audit Report sections described above.

Section I: Inventory of Santa Clara Valley Water District Flood Control Projects 1981-1996

Pursuant to the Management Audit work plan we compiled an inventory of all flood control projects planned and implemented since 1981, by flood control zone. To accomplish this inventory we scheduled and conducted interviews with key SCVWD staff to identify the process by which projects are approved, planned and managed. During these interviews we also identified the key documents of the District which contained details of the individual projects which were approved within each flood control zone since 1981. We scheduled and conducted interviews with accounting staff to determine how actual cost information for each capital project had been recorded and could be retrieved for comparison to projected project costs. The documents utilized as source documents in our analysis included benefit assessment documents, revenue and expenditure reports, and budgets.

A list of all projects which had been approved and all projects against which expenditures were recorded since 1981 was compiled. Many projects had similar but not exactly equivalent project titles, project account numbers and/or descriptions to other projects which we had identified. Some projects had been divided into smaller projects for accounting or project management purposes. We identified a total of 539 individual projects which had either been approved in past benefit assessment program plans, authorized in annual budgets or had accumulated expenditures in the accounting records of the District.

We found that major projects were initially identified in proposed benefit assessment program plans. Actual authority (appropriations) for expenditure of funds on capital projects, however, was based on approval in the annual budget of the District. Prior to Fiscal Year 1995-96 the capital project budgets were included in the annual operating budget and project appropriations were not carried forward from year to year. Project numbers and project titles and descriptions were not always consistent and changes occurred from year to year. While expenditures could be identified with appropriations which had been approved in previous District budgets, the expenditure data on many projects could not be easily matched to projects which had been included in benefit assessment program plans. Also, projects had been approved in previous benefit assessment program plans for which no appropriations or expenditures could be clearly identified. Most recently, the District has prepared a five-year capital program beginning in fiscal year 1997-98. We found that the five year capital program is a greatly improved budget and planning document than has been employed in the past.

Projects were not consistently defined from 1982 to the present and comparisons of actual to programmed costs could not be accomplished without substantial additional effort. Working within those limitations, we scheduled additional interviews with SCVWD staff in order to identify the major projects for each flood control zone. The intent was to define projects of sufficient size to be generally recognizable and for which flood protection benefits could be quantified. During these interviews with District staff we identified 59 past and present major projects within the five flood control zones. With further assistance from District staff we then classified each of the 539 individual projects which we had previously identified into these 59 major projects. While meaningful comparisons between planned and actual results could not have been made for all 539 individual projects, such comparisons could be made for these 59 major projects.

Sections I.A through I.E of this report provides a Zone by Zone inventory of major flood control projects that have been undertaken between 1981 and 1996. For each Flood Control Zone, we provide a summary description of activity. Each section also includes a schedule for each zone which lists the major projects, the cost estimates in the 1986 or 1990 flood control plans, actual expenditures from fiscal year 1981-82 to fiscal year 1995-96, cost estimates in the draft 1998-99 Capital Improvement Plan (CIP) and additional unfunded flood control projects beyond those identified in the draft 1998-99 CIP. Estimates of unfunded flood control projects were provided to our project team by District staff. The sections for each Zone also provides SCVWD staff comments on the projects, including reasons for variances between planned and actual cost and planned and actual completion dates.

In summary, our inventory found that of the 59 major projects which we identified with the assistance of District staff, 14 projects have been completed, 28 projects are in process and 17 projects had not yet been started. We found that, of the 42 total projects that have either been completed or are in process, the District has experienced significant cost increases for 11 of these major projects, as compared to preliminary cost estimates identified in either the 1986 or 1990 Benefit Assessment Plans. Significant delays from planned completion dates occurred on 10 of these projects. These cost increases and delays were primarily due to changes in regulatory requirements, changes in design to satisfy concerns of other agencies and residents, and inflationary increases for those projects which were not completed as scheduled.

Section II: Benefit Assessments

The Santa Clara Valley Water District (SCVWD) established Benefit Assessments under the 1982 Benefit Assessment Act, which allows the SCVWD to assess charges for the cost of providing flood control benefits. As stipulated by the 1982 Benefit Assessment Act, prior to the second year of imposing the assessment, approval by a majority of the voters within the specified zone was required. All revenues derived from such assessments must be used to pay the costs of services or facilities for which the assessment was levied, within the specified zone.

An independent test of the Benefit Assessment Rates set by the SCVWD found that the methods and practices used by the District to determine and set Benefit Assessment Rates for each of the Flood Control Zones yielded results that are in line with the standards set by the Benefit Assessment Program.

The SCVWD has established five Flood Control Zones, Central, East, Northwest, North Central and South, which cover most of Santa Clara County. Each zone operates as a separate financial entity, with specific projects funded by Benefit Assessment Fees, until June 30, 2000, when the Benefit Assessment Program is scheduled to sunset. Extending the Benefit Assessment

Program beyond June 30, 2000, now requires adherence to regulations imposed by the passage of California's Proposition 218.

Currently, the SCVWD has identified $191.1 million in future flood control projects, primarily funded with Benefit Assessments under the existing Program. In addition to funding capital projects, Benefit Assessments partially fund operating and maintenance costs for flood control facilities. With the pending sunset of the Benefit Assessment Program, on June 30, 2000, the SCVWD must: 1) find a method of replacing the amount of revenues from Benefit Assessments that are not related to annual debt service requirements on existing projects; or, 2) devise a method of replacing funding of maintenance and operations currently supported by Benefit Assessments; and/or 3) reduce spending for future flood control capital projects, and potentially reduce maintenance and operations spending to minimum requirements.

In order to maintain the required level of capital improvements related to enhancing and constructing flood control facilities, the SCVWD should: 1) investigate all available methods of generating revenue; 2) determine a level of capital construction, related to flood control, that allows the SCVWD to maintain the integrity of the existing flood control system; 3) analyze current maintenance and operations expenditures in each zone to determine whether or not the current maintenance and operations programs should be reduced to reflect decreases in available funding; and, 4) monitor the outcome of elections, held under the guidelines of Proposition 218, to determine its affect on deciding how to assess special benefits.

Section III: Implementing Ordinance Administration Fees

State law allows the Santa Clara Valley Water District to charge fees for services provided to developers for land development review activities, and to contract with local governments within its jurisdiction for the provision of flood control services. Currently, the Santa Clara Valley Water District does not charge any fees to developers who seek land development review services.

Due to the impending sunset of the Benefit Assessment Program, the SCVWD needs to investigate options that are available to generate revenue to fund capital projects, maintenance and operations. One such option is to begin charging developers fees for Land Development Review Services which are associated with the permitting process governed by District Ordinance 83-2. This type of cost recovery is not subject to the restrictions imposed by Proposition 218.

Santa Clara Valley Water District staff has investigated implementing such a program in the past. Due to difficulties regarding the cost and administration of a cost recovery program, and the potential increase in the cost of development, the SCVWD has not actively pursued this option. However, the impending sunset of the Benefit Assessment Program, and loss of $7.2 million annually, makes this option worth investigating. Based on the most recent workload statistics and proposed fees which would generate revenues equal to approximately 65 percent of the District's cost of conducting these activities, as much as $1.8 million in Land Development Service costs could be recovered.

In order to replace a portion of the revenues that will be lost upon the sunset of the currently authorized Benefit Assessment Program, the Santa Clara Valley Water District should: 1) develop an equitable fee schedule for land development review services and implement a fee program in order to recover a portion of the costs incurred for providing these services; and 2) work with local governments within its jurisdiction to facilitate the administrative processes associated with the collection of such fees, and if necessary provide assistance in amending ordinances and administrative regulations that could limit local governments' ability to collect and transmit such fees to the District.

Implementation of this recommendation would produce annual revenues to the SCVWD in the amount of between $1.3 million and $1.8 million annually, depending on a policy decision by the Board of Directors concerning fees and the level of cost recovery.

Section IV: Capital Project Budgeting and Financial Tracking

While performing the inventory of capital projects, which is described in Section 1 of this report, we conducted interviews with key SCVWD staff. During these interviews we identified the process by which projects are approved, planned and managed. During these interviews, we also identified the key documents of the District that contained details of the individual projects and reviewed management reports and other documents which related to the individual capital projects within each flood control zone.

We found that capital projects of the SCVWD have not been consistently defined so that the project costs and project benefits could be clearly justified, prioritized and reported to the District's managers, directors and the general public. Projects have typically been defined as the estimated cost of an individual contract to be awarded or the estimated cost of correcting a single problem within a larger drainage area. The benefits of capital projects (flood loss prevention), however, have typically been identified and quantified only for much larger projects or groups of projects.

The lack of consistent capital project identification does not allow accurate and meaningful comparisons of actual benefits to budgeted amounts or the amounts estimated at the time benefit assessments were established. Also, actual revenues received from non-District sources, such as the State or Federal government, are not readily available for each project to allow the District to compare the net District cost of each individual project with its benefits. Past budgets and benefit assessment plan documents did not clearly identify assumptions as to the amount and availability of funding from other public and private sources.

For Fiscal Year 1997-98 the District has prepared a detailed five-year Capital Improvement Plan. This plan included capital projects for Fiscal Year 1997-98 and for four additional years through Fiscal Year 2002-03. This Capital Improvement Plan provides a description of each project, identified appropriations to each project for planning, design and construction, and anticipated sources of funding. This Capital Improvement Plan is a greatly improved budget and planning document and should be updated on an annual basis.

We recommend that the SCVWD staff use a consistent project identification for each major project until it is completed. We also recommend that the SCVWD staff update the

District's five-year capital program on an annual basis and include additional information on estimated revenues and benefits of each project.

By defining major projects consistently and at a higher level and identifying flood loss prevention for every major project, each project can be justified, prioritized and evaluated in relation to other projects of the District resulting in improved decision making, project management and public understanding and support.

Section V: Addressing the Costs of Environmental Regulation to the District

The Santa Clara Valley Water District carries out its flood control function under environmental oversight from Federal and State agencies, and under the scrutiny of numerous local environmental and homeowner groups. Interviews with regulators and environmentalists indicate that the level of scrutiny has increased in recent years, and District records show instances of significant project time delays and additional costs as a result. Furthermore, environmentalists stated that they believe the District should take additional steps to demonstrate its environmental stewardship of local streams and wetlands.

Furthermore, mitigation for the impacts of ongoing maintenance activities, as was required for the District's 1997 sediment removal work, is a precedent-setting and potentially costly new regulatory requirement the District may have to address. The District is currently preparing a Maintenance Program Environmental Impact Report in order to obtain a 10-year maintenance permit. Currently, District staff estimate that, if mitigation is required under a 10-year maintenance permit, costs could exceed $50 million over the permit period.

Such costs were largely unforeseen in the early stages of project planning after the initial 1981 Benefit Assessment Election. To address these unforeseen costs in future projects, District staff should include and separately report a factor for changes and review anticipated on individual projects due to environmental regulations, taking into account current trends toward expanded regulation of District activities. The District should also sum the individual totals for these costs across all proposed future projects into a total figure to be included as part of the cost of any future District flood control program to be financed by future revenues.

By including more detailed information on these costs in project planning, the District will more accurately forecast individual project costs, and will be better able to predict what projects can be built from future revenues. The public will also be aware of how this money is being spent in assessing the costs and benefits of the flood control program for purposes of voting on any future funding measures.

Section VI: Flood Zone Advisory Committees

The Santa Clara Valley Water District uses five zone advisory committees as a primary contact with the public and local officials on flood control policies, projects and budgets. These committees represent cities, unincorporated areas and the general public, and meet quarterly to discuss District issues and make recommendations to the District's Board of Directors.

Improvements are needed in committee tracking of flood control project timing and budgets, review of the annual flood control budget, and communication with the Board of

Directors. Furthermore, at large members and those representing unincorporated areas report little contact with their constituents.

We therefore recommend that the District Board of Directors direct District staff to provide a standardized quarterly report to each flood zone advisory committee, showing the schedule and budgetary status of ongoing projects versus original proposals, and to include the most recent report, plus a history of ongoing and recently completed projects, in the handbook received by incoming advisory committee members. We also recommend that the annual budget review by flood zone advisory committees become an annual review of broad budgetary priorities by committees in February, rather than the formal review now occurring in May.

To improve communication between these committees and the District Board of Directors, all flood zone committees should receive summary lists of recommendations and referrals made following each meeting, and a summary of major flood zone committee actions should be provided to the Board of Directors in advance of the formal advisory committee minutes. Also, directors should attend flood zone advisory committee meetings, with each Director attending meetings in those zones the Director represents.

Finally, to improve flood zone committees' representation of all constituent groups, the District should amend the current system of at large and unincorporated area appointees to have those appointees represent specific stakeholder groups, such as the environmental community, agriculture and local business groups.

These steps should improve the quality of information provided to committee members, improve their ability to report on District activities to the public, and improve communication of the flood zone advisory committees' work to the District's Board of Directors. As a result, the Advisory Committees will be better able to advise the SCVWD Board of Directors. In addition, changes in committee membership to provide representation from specific stakeholder groups would enhance the committees' role.

Section VII: Project Status Reporting

In order to monitor capital projects, most entities develop a Project Tracking System that enables involved and interested parties to easily determine the status of a particular project and whether or not the project is on schedule.

The District has developed a Project Status Report form with the intent of providing SCVWD staff with information on the status of various capital projects. However, the report is not useful for the Board of Directors or the Advisory Committees as it: 1) does not provide clear and concise information on the nature of the project; 2) is confusing with regard to total project funding requirements; 3) does not provide adequate information on the timeframe of the status review and the amount of the total project which has been completed; and 4) does not provide complete explanations of variances in project schedules, or changes in the scope of projects.

As a result, Flood Zone Advisory Committee members believe that the information provided: does not lend itself to time and cost comparison; and is not presented in such a manner or timed in such a way that it is useful in reviewing Flood Control Zone budgets and making budget recommendations. Also, the general public, Board of Directors and Advisory Committees do not receive information that would allow them to easily identify flood control capital projects and determine: 1) how projects have been planned, scheduled and funded on a zone by zone, or District-wide basis; and 2) the impact of changes in the scope, timing or cost of projects on District resources.

In order to provide key decision makers with appropriate information we recommend that the Project Status Reports:

1) be simplified in terms of content and format so the General Manager, members of the Flood Zone Advisory Committees, the general public and members of the Board of Directors can easily determine the status of projects and the reasons for variances in cost and scheduling;
2) be produced on a monthly basis and distributed to the Board of Directors and Advisory Committee members at least one week prior to any meeting where status reports are discussed or reviewed;
3) become an integral part of the budget review process as well as the basis for the review of the District's Five-Year Capital Improvement Plan; and,
4) serve as the basis for a standardized semi-annual report to each Flood Zone Advisory Committee which shows the schedule and budgetary status of ongoing projects against original cost and scheduling projections.

Section VIII: Survey of Flood Management Practices in the Santa Clara Valley Water District and Comparable California Flood Control Districts

We conducted an extensive survey to compile detailed information on flood management practices of the Santa Clara Valley Water District and comparable California flood control districts.

With the assistance of District staff, a 40-question survey instrument was prepared and distributed to 10 Flood Control agencies in California. Flood control agencies in Alameda, Fresno, Los Angeles, Orange, Riverside, Sacramento, San Bernardino, San Diego, Santa Barbara and Ventura counties received the survey. After repeated contacts, eight counties (Los Angeles, Orange, Riverside, Sacramento, San Bernardino, San Diego, Santa Barbara and Ventura) responded to the survey with printed answers to the questions, and in some cases, supporting documents. In many cases, follow-up interviews were also conducted to clarify jurisdictions' responses.

Section IIX of this report discusses what we believe are some of the more interesting or important comparisons obtained from the survey. The detailed survey responses follow this section, starting with the SCVWD's response, and a summary of the responses of the other agencies (Appendix II), followed by the detailed individual responses from the other agencies (Appendix III). We have also provided District staff with the supporting documents submitted by the responding agencies.

Section I: Inventory of Santa Clara Valley Water District Flood Control Projects 1981-1996

Pursuant to the Management Audit work plan we compiled an inventory of all flood control projects planned and implemented since 1981, by flood control zone.

Methodology

To accomplish this inventory we scheduled and conducted interviews with key SCVWD staff to identify the process by which projects are approved, planned and managed. During these interviews we also identified the key documents of the District which contained details of the individual projects which were approved within each flood control zone since 1981. We scheduled and conducted interviews with accounting staff to determine how actual cost information for each capital project had been recorded and could be retrieved for comparison to projected project costs. The following documents were utilized as source documents in order to develop a comprehensive inventory of projects.

- Proposals and supporting data to implement or extend benefit assessments dated January, 1981, July, 1986 and January, 1990.
- Reports of Capital Planning and Construction revenues and expenditures from FY 1992 to FY 1996 prepared by the SCVWD Business Resources Group.
- SCVWD annual capital and operating budget documents.

A list of all projects which had been approved and all projects against which expenditures were recorded since 1981 was compiled. Many projects had similar but not exactly equivalent project titles, project account numbers and/or descriptions to other projects which we had identified. Some projects had been divided into smaller projects for accounting or project management purposes. We identified a total of 539 individual projects which had either been approved in past benefit assessment program plans, authorized in annual budgets or had accumulated expenditures in the accounting records of the District.

We found that major projects were initially identified in proposed benefit assessment program plans. Actual authority (appropriations) for expenditure of funds on capital projects, however, was based on approval in the annual budget of the District. Prior to Fiscal Year 1995-96 the District's capital budgets were included in the annual operating budget and appropriations were not carried forward except when encumbered, based on actual financial obligations of the District. Unencumbered and unexpended appropriations either lapsed or were reappropriated each year. Project numbers and project titles and descriptions were not always consistent and changes occurred from year to year. While expenditures could be identified with appropriations which had been approved in previous District budgets, the expenditure data on many projects could not be easily matched to projects which had been included in benefit assessment program plans. Also, projects had been approved in previous benefit assessment program plans for which no appropriations or expenditures could be clearly identified.

Projects were not consistently defined from 1982 to the present and comparisons of actual to programmed costs could not be accomplished without substantial additional effort. In addition, due to the past District practice of budgeting for multi-year capital projects on an annual basis, budgetary controls for such projects were limited. Since no single dollar amount was approved for most projects, there is no basis for a comparison between cumulative Board Approved appropriations and cumulative actual expenditures.

Working within those limitations, we then scheduled additional interviews with SCVWD staff in order to identify the major projects for each flood control zone. The intent was to define projects of sufficient size to be generally recognizable and for which flood protection benefits could be quantified. During these interviews with District staff we identified 59 past and present major projects within the five flood control zones. With further assistance from District staff we then classified each of the 539 individual projects which we had previously identified into these 59 major projects. While meaningful comparisons between planned and actual results could not have been made for all 539 individual projects, such comparisons could be made for these 59 major projects.

Section I.A - I.E: Major Projects Within Each Flood Control Zone

The following Sections I.A through I.E of this report provides a Zone by Zone inventory of major flood control projects that have been undertaken between 1981 and 1996. For each Flood Control Zone, we provide a summary description of activity, a schedule of major projects, and SCVWD staff comments on the projects, including the reasons for variances between planned and actual cost and planned and actual completion dates. The first column in the schedules for each Flood Control Zone that follows is a listing of the major projects within each flood control zone. The remaining columns within each schedule contain the following information.

Cost Estimates In the 1986-2000 Flood Control Plan - The flood control projects were planned in the 1981 program plan as part of a benefit assessment election with the goal of reducing potential flood damage by 60%. While the 1981 benefit assessment program plan included estimates of total flood control project costs within each zone, cost estimates for each of the major projects within each zone are not available. The flood protection goal was changed in 1986 to mitigation of potential damage from a 1% flood. The SCVWD prepared "A Proposal To Accelerate Flood Control Construction" in July 1986 which included a comprehensive list of projects which had been identified at that time with planned completion dates. This proposal also included cost estimates based on 1986 costs and estimates based on costs inflated based on the planned construction schedules and completion dates. This proposal, which included an accelerated listing of projects for four of the flood control zones (Northwest, Central, East and South) was approved by the voters in the November 1986 election. A subsequent proposal, which approved an accelerated listing of projects for the North Central flood control zone, was approved by the voters in the June 1990 election. The estimated cost of each major project based on these accelerated construction schedules and planned completion dates is shown in the second column of the following schedules.

Actual Expenditures FY 82 to FY 95 - The actual expenditures incurred for each major project through FY 95 is shown in the third column of the following schedules.

FY 96 Expenditures - The fiscal year 1995-96 actual expenditures of each project are shown in the fourth column of the following schedules.

Actual expenditures FY 82 to FY 96 - The actual expenditure incurred for each major project through FY 96 is shown in the fifth column of the following schedules.

Cost Estimates of Fundable Projects in the Draft 1998-99 Capital Improvement Plan (CIP) - In the sixth column of the following schedules we have shown the cost estimates of the fundable projects from the Draft 1998-99 Capital Improvement Plan within each zone, assuming continuation of the current benefit assessment rates until they sunset in the year 2000 and the issuance of those bonds which are currently authorized.

Unfunded Flood Control Projects - District staff advised us of certain major projects which were deemed as necessary but could not be funded with the projected revenues after benefit assessments sunset in the year 2000. Where available, the estimated costs of these additional flood control projects are included as the seventh column of the following schedules.

Section I.A - Northwest Zone

NORTHWEST ZONE SUMMARY

The original 1986 Flood Control program identified ten major capital projects in the Northwest Zone at an estimated cost of approximately $174 million.

Through Fiscal Year 1995-96, three major projects have been completed, and work has been performed on eight projects, at a total cost of $67.1 million. District staff estimate that approximately $58.8 million in additional project spending can be supported through 2010 with projected resources, including $29.9 million in authorized bonded indebtedness and $28.9 million in Benefit Assessment Revenue through the currently authorized period, which sunsets in the year 2000.

As shown in the last column of the table on the following page, District staff estimate that there are several projects amounting to $76.6 million in 1995 dollars that will remain unfunded. Major unfunded projects include the San Francisquito Creek project ($68.0 million), the Bayfront Levees project ($5.1 million) and the Hale Creek project ($3.5 million). According to the Comprehensive Flood Management Project Team[1], these unfunded facilities will continue to pose a significant flood threat to the community and the District needs to determine a level of capital construction to address these needs within projected funding limits.

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[1] Per discussions with members of the District's Comprehensive Flood Management Project Team which is currently coordinating planning and development of the future flood management program.

	Cost Estimates in 1986-2000 Flood Control Plan	Actual Expenditures FY 82 to FY 95	FY 96 Expenditures	Actual Expenditures FY 82 to FY 96	Cost Estimates for Funded Projects Identified in Draft 1998-99 CIP	Unfunded Flood Control Projects (1995 Dollars)
Northwest Zone Projects:						
Palo Alto Flood Basin	$713,000	$1,342,110		$1,342,110		
Stevens Creek	1,195,000	7,316,282	$24,795	7,341,077		
Adobe Creek (Lower)	9,233,000	17,119,170		17,119,170		
Barron Creek	20,806,000	1,249,156		1,249,156		
Matadero Creek	15,720,000	28,359,324	6,067,370	34,426,695	16,300,000	
Adobe Creek (Upper)	5,220,000	2,388,836	457,615	2,846,451	13,100,000	
Permanente Creek	8,900,000	2,612,760	12,464	2,625,224	28,000,000	
San Francisquito	45,609,000	144,565	661	145,225	1,400,000	68,000,000
Hale Creek	3,335,000					3,500,000
Bayfront Levees	63,211,000					5,100,000
Subtotal Major Projects	$173,942,000	$60,532,204	$6,562,906	$67,095,109	$58,800,000	$76,600,000
Other Projects	3,029,000					
Totals	$176,971,000	$60,532,204	$6,562,906	$67,095,109	$58,800,000	$76,600,000

Northwest Zone

Original 1981 Projects	Planned Completion	Projects Added in 1986	Planned Completion
Palo Alto Flood Basin (PAFB)	1987		
Stevens Creek, Diericx Dr.	1989		
Adobe Creek (Lower)	1994		
Barron Creek	2008		
Adobe Creek (Upper)	2010		
		Matadero Creek	2001
		Hale Creek	2011
		Permanente Creek	2014
		Bayfront Levees	2014
		San Francisquito Creek	2029

The status of the major projects within the Northwest Zone is as follows:

Palo Alto Flood Basin - This project was planned to be completed in 1987 at an estimated cost of $713,000. This project was substantially completed on schedule at a total cost of $1,342,110. The cost increase was due to extensive negotiations with the City of Palo Alto which resulted in a re-design of the project. As a result of these negotiations with the City and community input, the project was constructed at less than 1% flood capacity. Future work is required to raise the levee to the 1% flood capacity. The cost of this additional work has not yet been estimated.

Stevens Creek - Except for fish ladder modifications this project was completed in 1989 at an estimated cost of approximately $7.3 million. Most of the construction work on this project was completed prior to fiscal year 1984-85. Remaining costs were estimated at $1,195,000 in the 1986 program. Actual costs incurred since 1986 are within this estimate.

Adobe Creek (Lower) - This project was planned to be completed in 1994 at an estimated cost of $9,233,000. However, due to community concerns, a supplemental environmental impact report was prepared in 1990 and the design was changed accordingly to mitigate impacts to adjacent homeowners. The project was completed on schedule at a total cost of $17,119,170, approximately $7.9 million more that the original 1986 estimate.

Barron Creek- In 1986 this project was estimated to cost a total of $20.8 million with a completion date in 2008. $1,249,156 was expended on planning and design. This project was incorporated into the design and construction of the Matadero Creek project.

Matadero Creek - This project was estimated to cost $15.7 million in 1986. Expenditures through 1996 on this project were $34,426,695 and $682,000 was budgeted in fiscal year 1996-97. The cost increase was due primarily to incorporating Barron Creek into this project, extensive community participation during design and construction phases of the project, and a more expensive construction method to avoid the impacts of contaminated soils and ground water from adjacent areas. The $35.7 million in actual expenditures for the two projects was approximately $800,000 less than the combined original estimate of $36.5 million. This project was essentially completed in 1997. Additional costs estimated at $16.3 million were included in the Draft 1998-99 CIP mainly to address erosion control and maintenance access problems on Matadero Creek upstream of Foothill Expressway ($4.7 million) and remediation work upstream of Louis Road ($11.6 million).

Adobe Creek (Upper) - This project was estimated to cost $5,220,000 in 1986 and was estimated to be completed in 2010. Planning is nearly completed except for permits. Expenditures through 1995 on this project were $2.4 million. The Draft 1998-99 CIP included $13.1 million for this project. The cost estimates of this project increased from the 1986 estimates because the draft Environmental Impact Report has been completed and a specific plan selected.

Permanente Creek - This project was estimated to cost $8,900,000 in 1986 and was estimated to be completed in 2010. Expenditures through 1995 on this project were $2.6 million including approximately $1.3 million in emergency construction to correct flooding on the diversion which occurred in 1983. The Draft 1998-99 CIP included $28.0 million for this project. The cost estimates of this project will be refined when the planning study, which recommends the flood control alternatives, is complete.

San Francisquito Creek - This project was estimated to cost $45,609,000 in 1986 and was estimated to be completed in 2029. Expenditures through 1995 on this project were $144,565. The Draft 1998-99 CIP included $1.4 million for a gabion slope erosion protection project along Palo Alto Avenue. Additional flood control work will be needed which is currently estimated to cost at least $68.0 million.

Hale Creek - This project was estimated to cost $3,335,000 in 1986 and was estimated to be completed in 2011. No expenditures have been incurred on this project to date and funding has not yet been identified. Future flood control work will be needed which is estimated to cost at least $3.5 million.

Bayfront Levees - This project was estimated to cost $63,211,000 in 1986 and was estimated to be completed in 2014. No expenditures have been incurred on this project to date and funding has not yet been identified. Future flood control work will be needed after 2010, which is estimated to cost at least $5.1 million.

Financial Summary

Capital projects have been identified in the Northwest Zone which total $202.4 million as follows:

	Millions
Capital Project Expenditures from FY 1982 to FY 1996	$67.0
Capital Projects identified in the Draft 1998-99 CIP with current benefit assessment and current bond authorization	58.8
Projected Additional Flood Control Projects not funded with current benefit assessment and current bond authorization	76.6
Total	$202.4

Section I.B - North Central Zone

NORTH CENTRAL ZONE SUMMARY

The original 1990 Flood Control program identified 12 major capital projects in the North Central Zone at an estimated cost of approximately $257.9 million.

Through Fiscal Year 1995-96, three major projects have been completed, and work has been performed on nine major projects, at a total cost of $39.8 million. District staff estimate that approximately $2.9 million in additional project spending can be supported through 2010 with projected Benefit Assessment Revenue through the currently authorized period, which sunsets in the year 2000.

As shown in the last column of the table on the following page, District staff estimate that there are several projects amounting to $45.0 million in 1995 dollars that will remain unfunded. Major unfunded projects include the San Tomas Aquino Creek Remediation project ($11.0 million), Calabazas Creek (24.0 million), Sunnyvale East ($5.0 million) and Sunnyvale West ($5.0 million). In addition to these projects, cost estimates for several other projects listed in the last column of the table on the following page have not been updated since 1990 and are not available. According to the Comprehensive Flood Management Project Team, these unfunded facilities will continue to pose a significant flood threat to the community and the District needs to determine a level of capital construction to address these needs within projected funding limits.

	Cost Estimates in 1986-2000 Flood Control Plan	Actual Expenditures FY 82 to FY 95	FY 96 Expenditures	Actual Expenditures FY 82 to FY 96	Cost Estimates for Funded Projects Identified in Draft 1998-99 CIP	Unfunded Flood Control Projects (1995 Dollars)
North Central Zone Projects:						
San Tomas Creek (Hwy 101 to Williams)		$2,882,381		$2,882,381		
Calabazas Creek Culverts		1,008,555		1,008,555		
Saratoga Creek (Lawrence to Prunridge)	$347,000	9,732,879	$2,513	9,735,392		
Calabazas Creek (Miller to Wardell)	8,431,000	1,005,616	7,129	1,012,745		$24,000,000
Calabazas Creek (Guadalupe Slough to Miller)	14,863,000	17,206,761	7,837,751	25,044,513	2,900,000	
Saratoga Creek (Prospect to Fourth Street)	880,000					Not Available*
San Tomas Aquino Creek (North of Hwy 101)	106,848,000	43,148	63,934	107,082		Not Available*
San Tomas Creek Remediation						11,000,000
Sediment Basins	7,263,000					Not Available*
Sunnyvale East	7,138,000	420		420		5,000,000
Wildcat Creek	1,206,000					Not Available*
Regnart Creek	429,000	17,836		17,836		Not Available*
Sunnyvale West	871,000	280		280		5,000,000
Guadalupe Slough	52,818,000					Not Available*
Bayfront Levees	56,764,000					Not Available*
Subtotal Major Projects	$257,858,000	$31,897,876	$7,911,328	$39,809,204	$2,900,000	$45,000,000
Other Projects	2,871,000	12,205		12,205		
Totals	$260,729,000	$31,910,080	$7,911,328	$39,821,408	$2,900,000	$45,000,000

* Cost estimates have not been updated since 1990

North Central Zone

Original 1981 Projects	Planned Completion	Projects Added in 1990	Planned Completion
San Tomas (Hwy 101 to Williams)	1983		
Calabazas Creek Culverts	1984		
Saratoga Creek	1988		
Calabazas Creek	1996		
		Saratoga Creek (Prospect to Forth Street)	1995
		San Tomas Aquino Creek	1996
		Sediment Basins (Calabazas, San Tomas)	2000
		Sunnyvale East	1995
		Wildcat Creek	1996
		Regnart Creek	1991
		Sunnyvale West	1994
		Guadalupe Slough	2036
		Bayfront Levees	2050

The status of the major projects within the North Central Zone is as follows:

San Tomas Creek (Highway 101 to Williams) - This project was completed in 1983 at a cost of $2,882,381.

Calabazas Creek Culverts - This project was completed in 1984 at a cost of $1,008,555.

Saratoga Creek - This project was planned to be completed in 1988 at an estimated cost of $6.7 million. $347,000 was included in the 1990 Flood Control Program for completion of this project. This project is now completed at a total cost of $9,735,392. The cost increase of approximately $3.0 million was due to the actual cost of construction which was approximately $0.5 million more than estimated, higher design costs than estimated due to more use of consultants, and unanticipated legal costs for litigation with two contractors.

Calabazas Creek (Miller to Wardell) - Expenditures through 1996 on this project totaled $1,012,745 for planning and culverts. This project was estimated to cost $8,431,000 in the 1990 flood control program. Funding for this project has not yet been identified. According to SCVWD Staff, future flood control work will be needed which in 1995 was estimated to cost at least $24.0 million.

Calabazas Creek (Guadalupe Slough to Miller) - This project was estimated in the 1990 flood control program to cost $14,863,000 and to be completed in 1996. The cost estimate was increased to $16.5 million and the scheduled completion date was changed to 1997 when the detailed planning study was completed in 1992. The project is now in the final phase of construction and is scheduled to be completed in 1999. Expenditures through 1996 totaled $25,044,513 and the total project cost is estimated to be $27.0 million. The schedule delay and cost increase are due primarily to: (1) unanticipated soil conditions which resulted in a change from levee raising to a more expensive flood wall; (2) unanticipated ground water and sediment contamination problems; (3) extensive negotiation to accommodate Kaiser Hospital's development plan upstream of Homestead Road; and, (4) design changes to accommodate regulatory agencies' requirements over a two year period. The Draft 1998-99 CIP included $2.9 million for this project. The last construction contract on this project has been awarded and is expected to be competed in March, 1999.

Saratoga Creek (Prospect to Fourth Street) - This project was added in the 1990 flood control program and planned to be completed in 1995. This project was estimated to cost $880,000 in the 1990 Flood Control Program. No expenditures have been incurred on this project and funding for this project has not yet been identified. Future flood control work will be needed but cost estimates have not been updated since 1990.

San Tomas Aquino Creek - This project was added in the 1990 flood control program with an estimated construction cost of $106,848,000 and completion in 2016. $107,082 has been expended through 1996 on this project and funding for this project has not yet been identified. Additional flood control work will be needed but cost estimates have not been updated since 1990.

San Tomas Aquino Creek Remediation Project (North of Highway 101) – This project was not in the 1990 program. This is a new project for a problem which was not identified until the 1995 flood. No expenditures have been incurred on this project through 1996. Funding for this project of $11.0 million has not yet been identified.

Sediment Basins - This project was added in the 1990 flood control program with an estimated construction cost of $7,236,000 and completion in 1999. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Future flood control work will be needed but cost estimates have not been updated since 1990.

Sunnyvale East - This project was added in the 1990 flood control program with an estimated construction cost of $7,138,000 and completion in 1995. $420 has been expended through 1996. Funding for this project has not yet been identified. Future flood control work will be needed which was estimated in 1995 at $5.0 million.

Wildcat Creek - This project was added in the 1990 flood control program with an estimated construction cost of $1,206,000 and completion in 1996. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Future flood control work will be needed but cost estimates have not been updated since 1990.

Regnart Creek - This project was added in the 1990 flood control program with an estimated construction cost of $429,000 and completion in 1991. $17,836 has been expended through 1996 on this project. Funding for this project has not yet been identified. Future flood control work will be needed but cost estimates have not been updated since 1990.

Sunnyvale West - This project was added in the 1990 flood control program with an estimated construction cost of $871,000 and completion in 1994. $280 has been expended through 1996 on this project. Funding for this project has not yet been identified. Future flood control work will be needed which was estimated in 1995 at $5.0 million.

Guadalupe Slough - This project was added in the 1990 flood control program with an estimated construction cost of $52.8 million and completion in 2036. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Future flood control work will be needed but cost estimates have not been updated since 1990.

Bayfront Levees - This project was added in the 1990 flood control program with an estimated construction cost of $56,764,000 and completion in 2050. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Future flood control work will be needed but cost estimates have not been updated since 1990.

Financial Summary

Capital projects have been identified in the North Central Zone which total $87.7 million as follows:

	Millions
Capital Project Expenditures from FY 1982 to FY 1996	$39.8
Capital Projects identified in the Draft 1998-99 CIP with current benefit assessment and bond authorization	2.9
Additional Flood Control Projects not funded with current benefit assessment and bond authorization	45.0
Total	$87.7

Section I.C - Central Zone

CENTRAL ZONE SUMMARY

The original 1986 Flood Control program identified ten major capital projects in the Central Zone at an estimated cost of approximately $126.8 million.

Through Fiscal Year 1995-96, three major projects have been completed, and work has been performed on eleven major projects, at a cost of $108.8 million. District staff estimate that approximately $39.5 million in additional project spending can be supported through 2010 with projected resources, including $10.0 million in authorized bonded indebtedness and $29.5 million in Benefit Assessment Revenue through the currently authorized period, which sunsets in the year 2000.

In addition to the bond funding and benefit assessment revenue shown above, the flood control program in the Central Zone is very dependent on reimbursements from the State subventions program. The Guadalupe River projects through downtown San Jose is a jointly sponsored project with the Corps of Engineers. The District has an agreement with the State of California to reimburse the district for 70% of the local share of the total project cost. To date, the State has reimbursed the District approximately $4.8 million and an additional $18 million is due to be reimbursed to the District.

As shown in the last column of the table on the following page, District staff estimate that there are several projects amounting to $136.9 million in 1995 dollars that will remain unfunded. Major unfunded projects include Guadalupe River from I-280 to Blossom Hill ($114.0 million), Los Gatos Creek ($11.5 million), Ross Creek ($5.0 Million) and Canoas Creek ($6.3 million). In addition to these projects, cost estimates for several other projects listed in the last column have not been updated since 1986 and are not available. According to the Comprehensive Flood Management Project Team, these unfunded facilities will continue to pose a significant flood threat to the community and the District needs to determine a level of capital construction to address these needs within projected funding limits.

	Cost Estimates in 1986-2000 Flood Control Plan	Actual Expenditures FY 82 to FY 95	FY 96 Expenditures	Actual Expenditures FY 82 to FY 96	Cost Estimates for Funded Projects Identified in Draft 1998-99 CIP	Unfunded Flood Control Projects (1995 Dollars)
Central Zone Projects:						
Ross Creek	$4,491,000	$195,463		$195,463		$5,000,000
Randol Creek	704,000					Not Available*
Los Gatos Creek	17,967,000	9,249	$522	9,771		11,500,000
Lower Coyote Creek-Contribution	2,968,000	3,800,187		3,800,187		
Guadalupe River (Gold Street Bridge)	1,030,000	1,450,344		1,450,344		
Guadalupe River (Marina to Highway 101)	2,777,000	7,958,977	399,507	8,358,484		
Guadalupe River (San Francisco Bay to I-280)		2,443,711		2,443,711	$19,300,000	
Guadalupe River (I-880 to I-280)	11,535,000	47,766,820	17,909,002	65,675,822	18,900,000	
Guadalupe River (I-280 to Blossom Hill)	85,038,000	20,502,419	3,771,367	24,273,785	596,000	114,000,000
Guadalupe River (Willow Street to Blossom Hill) Corps Project	48,000	3,377	595	3,973	740,000	
Alamitos Creek	284,000	2,532,670	15,165	2,547,836		118,000
Canoas Creek		74,046		74,046		6,300,000
Subtotal Major Projects	$126,842,000	$86,737,263	$22,096,159	$108,833,422	$39,536,000	$136,918,000
Other Projects	3,845,000	707	($0)	707		
Totals	$130,687,000	$86,737,971	$22,096,158	$108,834,129	$39,536,000	$136,918,000

* Cost estimate has not been updated since 1986.

Central Zone

Original 1981 Projects	Planned Completion	Projects Added in 1986	Planned Completion
Guadalupe River:			
Marina to Hwy 101	1983		
Highway I-880 to I-280 (Corps)	1993		
		Coyote Creek Contribution	1987
		Guadalupe River:	
		Gold Street Bridge	1987
		I-280/Blossom Hill Road	1999
		Willow/Blossom Hill Rd. (Corps)	Unk
Ross Creek	2000		
Randol Creek	2001		
Los Gatos Creek	2002		
Alamitos Creek	1987		

Projects Added After 1986:

Canoas Creek	Unk
Guadalupe River (San Francisco Bay to I-280)	Unk

The status of the major projects within the Central Zone is as follows:

Ross Creek - This project was initially included in the 1981 flood control program, and continued in the 1986 program with an estimated construction cost of $4,491,000 and completion in 1996. Expenditures of $195,463 were incurred on this project through 1984. This project was subsequently combined with the Guadalupe River (I-280 to Blossom Hill Road) project.

Randol Creek - This project was included in the 1981 flood control program, and continued in the 1986 program with an estimated construction cost of $704,000 and completion in 1997. No expenditures have been incurred on this project. Funding for this project has not yet been identified. Future flood control work will be needed but the cost estimates have not been updated since 1986.

Los Gatos Creek - This project was included in the 1981 flood control program, and continued in the 1986 program with an estimated construction cost of $17,967,000 and completion in 2002. Expenditures of $9,771 have been incurred on this project through 1996. Funding for this project has not yet been identified. Future flood control work will be needed which was estimated in 1995 at $11.5 million.

Lower Coyote Creek Contribution - This project was added in the 1986 program with an estimated construction cost of $2,968,000 and completion in 1987. This project was completed on schedule. Expenditures of $3,800,187 have been incurred on this project and no further expenditures are anticipated. The increased cost of this project was due to unanticipated right-of-way costs on the Lower Coyote Creek project.

Guadalupe River (Gold Street Bridge) - This project was added in the 1986 program with a cost of $1,030,000 and completion in 1988. Expenditures of $1,450,344 have been incurred on this project and the project was completed in 1987. Increased costs on this project were incurred due to unforeseen hazardous materials mitigation.

Guadalupe River (Marina to Highway 101) - This project was included in the 1981 flood control program. It was completed on schedule in 1984 at a cost of approximately $6.9 million. This project was continued in the 1986 program with a remaining cost of $2,777,000 for revegetation work to mitigate the impacts of the project. The revegetation work was completed on schedule in 1995. An element of the project, relocation of Hetch-Hetchy pipelines, was delayed to 1996 due to negotiations with the San Francisco Water Department. Expenditures of $8,358,484 have been incurred on this project through 1996, and it is now completed.

Guadalupe River (San Francisco Bay to I-880) - This levee restoration project was not in the 1986 program. This is a new project for a problem which was not identified until the 1995 flood. Expenditures of $2,443,711 have been incurred on this project for interim levee restoration work through 1996. Funding for this project of $19.3 million is included in the Draft 1998-99 CIP.

Guadalupe River (I-880 to I-280) - This project through downtown San Jose was included in the 1981 flood control program. This project was continued in the 1986 program with an estimated local share of construction cost of $11,535,000 and completion in 1993. Total expenditures of $65,675,822 had been incurred on this project through 1996 and an additional $18.9 million was included in the Draft 1998-99 CIP for this project. $7.5 million was reimbursed by the Corps of Engineers in fiscal year 1995 and fiscal year 1996 for this project. Another $14 million reimbursement from the Corps is expected in fiscal year 1998. Since the State of California has not fully funded its flood control subventions program, the District has funded the state's obligation (approximately $35 million) for this project. The cost increase is due primarily to significant design changes to comply with environmental regulations.

Guadalupe River (I-280 to Blossom Hill Road) - This project was added in the 1986 program with an estimated construction cost of $85,038,000 and completion in 1999. Expenditures of $24,273,785 have been incurred on this project through 1996. The 1997 Guadalupe Project Planning Study estimated the project cost at $114 million. Funding for this project has not yet been identified. The Draft 1998-99 CIP included $596,000 to complete the planning study. This work has been carried out by the District on a parallel track with the Guadalupe River project below, which may be eligible for federal and state funding.

Guadalupe River (Willow Street to Blossom Hill Road (Corps) - This project was added in the 1986 program as a planning project with a cost of $48,000 and completion in 1989. Expenditures of $3,973 have been incurred on this project through 1996 and an additional $740,000 is included in the Draft 1998-99 CIP for the local share of planning costs for this project. The total planning costs of this project are estimated at $5.2 million. This planning project will allow the District to seek federal funding through cost-sharing with the Corps of Engineers on the Corps Feasibility Planning Study. The Study will determine if there is a federal interest in the Guadalupe River Project (I-280 to Blossom Hill Road) mentioned above. The Corps may fund up to 50 percent of the Guadalupe River Project (I-280 to Blossom Hill Road) which is currently estimated at $114 million. This project is also being evaluated as a potential project that would be eligible for state reimbursements.

Alamitos Creek - This project was included in the 1981 flood control program. This project was continued in the 1986 program with a remaining cost of $284,000 and completion in 1987. Expenditures of $2,547,836 have been incurred on this project and it has been completed as designed. An additional $118,000 is estimated for fish ladders due to new regulatory requirements, however, funding for this work has not yet been identified.

Canoas Creek - This project was not in the 1986 program. Expenditures of $74,046 have been incurred on this project through 1996. Additional flood control work will be needed which was estimated in 1995 at $6.3 million.

Financial Summary

Capital projects have been identified in the Central Zone which total $285.2 million as follows:

	Millions
Capital Project Expenditures from FY 1982 to FY 1996	$108.8
Capital Projects identified in the Draft 1998-99 CIP with current benefit assessment and bond authorization	39.5
Additional Flood Control Projects not funded with current benefit assessment and bond authorization	136.9
Total	$285.2

Section I.D - East Zone

EAST ZONE SUMMARY

The original 1986 Flood Control program identified 13 major capital projects in the East Zone at an estimated cost of approximately $131.7 million.

Through Fiscal Year 1995-96, three major projects have been completed, and work has been performed on eight major projects, at a total cost of $75.5 million. District staff estimate that approximately $89.5 million in additional project spending can be supported through 2010 with projected resources, including $27.0 million in authorized bonded indebtedness and $62.5 million in Benefit Assessment Revenue through the currently authorized period, which sunsets in the year 2000.

The East Zone depends on federal and State flood control cost sharing for Lower Silver Creek, Upper Penitencia Creek and the Berryessa Creek projects. The District has been successful in completing the Coyote Creek project from the Bay to Montague Expressway. The Corps of Engineers has met its funding obligations, while the State has provided only approximately $1.5 million and still owes the District an outstanding balance of approximately $13.9 million for its share of the project cost.

As shown in the last column of the table on the following page, District staff estimate that the Upper Penitencia Creek project amounting to $34.0 million in 1998 dollars will remain unfunded. In addition to the Upper Penitencia Creek project, cost estimates for several other projects listed in the last column have not been updated since 1986 and are not available. According to the Comprehensive Flood Management Project Team, these unfunded facilities will continue to pose a significant flood threat to the community and the District needs to determine a level of capital construction to address these needs within projected funding limits.

	Cost Estimates in 1986-2000 Flood Control Plan	Actual Expenditures FY 82 to FY 95	FY 96 Expenditures	Actual Expenditures FY 82 to FY 96	Cost Estimates for Funded Projects Identified in Draft 1998-99 CIP	Unfunded Flood Control Projects (1995 Dollars)
East Zone Projects:						
Lower Silver Creek	$1,796,000	$4,100,489	$58,684	$4,159,174	$37,900,000	
Berryessa Creek-Corps	981,000	862,751	146,625	1,009,376	41,100,000	
Upper Penitencia Creek	1,567,000	439,812	132,054	571,866		34,000,000
Wrigley - Ford Ditch	1,363,000	3,277,434		3,277,434		
Coyote Creek - Corps	23,449,000	52,025,663	4,776,654	56,802,317	1,900,000	
Coyote Creek (Montague to Anderson Dam)	48,799,000	2,261,569	87,530	2,349,099	8,600,000	Not Available*
Fisher Creek	29,863,000					Not Available*
South Babb Creek	6,613,000					Not Available*
Los Coches Creek	9,057,000					Not Available*
Calera Creek	1,499,000					Not Available*
Thompson Creek	5,604,000	829,445		829,445		Not Available*
Yerba Buena Creek	684,000					Not Available*
Lower Penitencia Creek	437,000	5,555,981	664,255	6,220,236		
Subtotal Major Projects	$131,712,000	$69,353,145	$5,865,802	$75,218,947	$89,500,000	$34,000,000
Other Projects	2,713,000	245,355		245,355		
Totals	$134,425,000	$69,598,500	$5,865,802	$75,464,302	$89,500,000	$34,000,000

* Cost estimates have not been updated since 1986.

East Zone

Original 1981 Projects	Planned Completion	Projects Added in 1986	Planned Completion
Lower Penitencia Creek	Unk		
		Wrigley Ford Ditch	1989
Lower Silver Creek (SCS)	1990		
Berryessa Creek (Corps)	1991		
		Coyote Creek (Corps)	1993
		Coyote Creek (Montague to Anderson Dam)	2001
		Fisher Creek Bailey/Tilton	2002
		South Babb Creek	2003
		Los Coches Creek	2004
Upper Penitencia Creek (SCS)	2005		
		Calera Creek	2008
Thompson Creek	2009		
		Yerba Buena Creek	2009

Projects Added After 1986:

Quimby Creek
Fowler Creek
Evergreen Creek

The status of the major projects within the East Zone is as follows:

Lower Silver Creek - This project was included in the 1981 flood control program, and continued in the 1986 program with an estimated local share of the project cost of $1,796,000. The total estimated cost of the project was estimated at approximately $18.0 million. Expenditures of $4,159,174 have been incurred on this project of which $854,240 was reimbursed by Natural Resource Conservation Service (NRCS). This project is included in the Draft 1998-99 CIP at a cost of $37.9 million assuming all local funds. Any reimbursements from NRCS or the State of California will be helpful to the East Zone in funding of other projects.

Berryessa Creek (Corps) - This project was included in the 1981 flood control program, and continued in the 1986 program with an estimated local share of construction cost of $981,000 and completion in 1989. Expenditures of $1,009,376 have been incurred on this project. The project is included at a cost of $41.1 million in the Draft 1998-99 CIP. The Berryessa Creek project was identified for a 1996 Water Resources Development Act, Section 211 agreement with the Corps of Engineers. Under this agreement, the SCVWD will take over responsibility for the project design and construction, and the Corps of Engineers will reimburse the District for the Federal share of the project cost. State participation has also been requested on this project.

Upper Penitencia Creek (SCS) - This project was included in the 1981 flood control program, and continued in the 1986 program with an estimated construction cost of $1,567,000 and completion in 1995. Expenditures of $571,866 have been incurred on this project and it is estimated that $34.0 million is needed to complete this project. The District has requested that the Army Corps of Engineers build this project. State participation will also be requested.

Wrigley-Ford Ditch - This project was added in the 1986 program with a cost of $1,363,000 and completion in 1989. The Engineer's Report of June, 1989 estimated the total cost of the project to be $1.8 million. Expenditures of $3,277,434 have been incurred on this project and it was completed in 1993. The actual construction cost of the project was $0.5 million more than estimated in the Engineer's Report. The cost increase was due primarily to the City of Milpitas requirements such as specifying a specific brand of emergency generator and sound proofing of the pump house. Also contributing to the higher cost was more use of consultants than anticipated during design and costs to negotiate an agreement with the City of Milpitas to assume maintenance of the facility.

Coyote Creek (Corps) - This project was added in the 1986 program with a cost of $23,449,000 and completion in 1993. Expenditures of $56,802,317, including Army Corps expenditures have been incurred on this project through 1996 and it is completed. Approximately $30.0 million of the total expenditures of $56,802,317 has been or is expected to be reimbursed by the Corps of Engineers. The District has an agreement with the State to reimburse 70% of the local share of the project cost which is estimated at $15.4 million. To date approximately $1.5 million has been received and the State still owes the District an outstanding balance of approximately $18.0 million for its share of the project cost. It is estimated in the Draft 1998-99 CIP that a total of $1.9 million is needed to complete this project

Coyote Creek (Montague to Anderson Dam) - This project was added in the 1986 program with a cost of $48,799,000 and completion in 2001. Expenditures of $2,349,099 have been incurred on this project through 1996 and it is included in the Draft 1998-99 CIP at a cost of $8.6 million. Additional flood control work will be needed, however, additional funding for this project has not yet been identified and cost estimates have not been updated since 1986.

Fisher Creek - This project was added in the 1986 program with an estimated cost of $29,863,000 and completion in 1998. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Additional flood control work will be needed but cost estimates have not been updated since 1986.

South Babb Creek - This project was added in the 1986 program with a cost of $6,613,000 and completion in 1998. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Additional flood control work will be needed but cost estimates have not been updated since 1986.

Los Coches Creek - This project was added in the 1986 program with a cost of $9,057,000 and completion in 1999. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Additional flood control work will be needed but cost estimates have not been updated since 1986.

Calera Creek - This project was added in the 1986 program with a cost of $1,499,000 and completion in 2002. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Additional flood control work will be needed but cost estimates have not been updated since 1986.

Thompson Creek - This project was included in the 1981 flood control program and continued in the 1986 program with an estimated cost of $5,604,000 and completion in 2002. Expenditures of $829,445 have been incurred through 1996 on this project for remedial construction to comply with new Federal Emergency Management Agency standards. Funding for this project has not yet been identified. Additional flood control work will be needed but cost estimates have not been updated since 1986.

Yerba Buena Creek - This project was added in the 1986 program with a cost of $684,000 and completion in 2002. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Additional flood control work will be needed but cost estimates have not been updated since 1986.

Lower Penitencia Creek - This project was included in the 1981 flood control program. Flood control measures were completed in 1985 at a cost of $4,410,317. This project was continued in the 1986 program with a remaining cost of $437,000 for flood wall construction at the confluence with Coyote Creek. Total expenditures of $6,220,236 have been incurred on this project through 1996 and it is completed.

Quimby Creek, Fowler Creek and Evergreen Creek - Since funding for these projects will not be available in the foreseeable future, cost estimates have not yet been prepared.

Financial Summary

Capital projects have been identified in the East Zone which total $199.0 million as follows:

	Millions
Capital Project Expenditures from FY 1982 to FY 1996	$75.5
Capital Projects identified in the Draft 1998-99 CIP with current benefit assessment and bond authorization	89.5
Additional Flood Control Projects not funded with current benefit assessment and bond authorization	34.0
Total	$199.0

Section I.D - South Zone

SOUTH ZONE SUMMARY

The original 1986 Flood Control program identified six major capital projects in the South Zone at an estimated cost of approximately $53.7 million.

Through Fiscal Year 1995-96, two major projects have been completed (Uvas Creek and Lower Llagas Creek), and work is in progress on a third major project. Expenditures through fiscal year total $36.8 million. District staff estimate that approximately $339,000 in additional project spending can be supported through 2010 with projected Benefit Assessment Revenue through the currently authorized period, which sunsets in the year 2000.

The South Zone's Uvas and Lower Llagas Creek projects depended almost entirely on federal and State funding. The Uvas Creek project has been completed and reimbursement funds have $5.0 million. This disagreement relates to project expenditures of the District which have been approved by the Corps of Engineers but disallowed by the State. The Natural Resource Conservation Service and the State have met their funding agreements for the Lower Llagas Creek project in the Gilroy area.

The State, however, has not provided reimbursements for the Upper Llagas Creek project in the Morgan Hill area for the past several years and the Natural Resources Conservation Service does not have funding available to complete this project. The South Zone cannot complete this project with current local revenues without both federal and State funding. District staff is requesting State participation and that the Corps of Engineers provide federal funding for this project.

As shown in the last column of the table on the following page, District staff estimate that there are several projects amounting to $53.3 million in 1995 dollars that will remain unfunded. Major unfunded projects include Upper Llagas Creek ($14.6 million), Llagas Creek from Santa Teresa to Chesbro Reservoir ($16.4 million), Tennant Creek ($3.5 million), Uvas-Carnardero Creek ($14.7 million) and Jones Creek ($4.1 million). In addition to these projects, a cost estimate for Dexter Creek has not been updated since 1986 and is not available. According to Comprehensive Flood Management Project Team, these unfunded facilities will continue to pose a significant flood threat to the community and the District needs to determine a level of capital construction to address these needs within projected funding limits.

	Cost Estimates in 1986-2000 Flood Control Plan	Actual Expenditures FY 82 to FY 95	FY 96 Expenditures	Actual Expenditures FY 82 to FY 96	Cost Estimates for Funded Projects Identified in Draft 1998-99 CIP	Unfunded Flood Control Projects (1995 Dollars)
South Zone Projects:						
Uvas Creek - Corps (Uvas Carnardero)	$14,673,000	$12,643,149	$146	$12,643,295		$14,700,000
Lower Llagas PL 566	10,692,000	14,167,642	827,999	14,995,641	$339,000	
Upper Llagas Creek	12,164,000	8,853,749	235,600	9,089,349		14,600,000
Tennant Creek	12,084,000					3,500,000
Jones Creek		20,254		20,254		4,100,000
Dexter Creek	814,000					Not Available*
Llagas Creek (Santa Teresa to Chesbro Reservoir)	3,258,000	7,605		7,605		16,400,000
Subtotal Major Projects	$53,685,000	$35,692,398	$1,063,745	$36,756,143	$339,000	$53,300,000
Other Projects	2,099,000					
Totals	$55,784,000	$35,692,398	$1,063,745	$36,756,143	$339,000	$53,300,000
*Cost estimate has not been updated since 1986.						
Grand Total All Zones	**$758,596,000**	**$284,471,153**	**$43,499,938**	**$327,971,091**	**$191,075,000**	**$345,818,000**

South Zone

Original 1981 Projects	Planned Completion	Projects Added in 1986	Planned Completion
Uvas Creek (Corps)	1989		
Upper Llagas Creek (PL-566)	1996		
Lower Llagas Creek (PL-566)	1996		
		Tennant-Corralitos Creeks -- Interim	2008
		Jones Creek	2019
		W. Little Llagas Creek Wright/Llagas Avenue	2030
		Uvas-Carnadero Creek Pajaro River/Highway 101	unk.
		Uvas-Carnadero Creek Highway 101/Thomas Road	unk.
		W. Branch Llagas Creek Day/Fitzgerald	unk.
		Dexter Creek Jones/Pacheco Highway	unk.
		Llagas Creek Santa Teresa/Chesbro Dam	unk.
		Tennant-Corralitos Creeks (Phase 2)	unk.

The status of the major projects within the South Zone is as follows:

Uvas Creek - Corps (Uvas Carnardero) - This project was included in the 1981 flood control program. This project was continued in the 1986 program with a cost of $14,673,000 and completion in 1993. Expenditures of $12,643,295 have been incurred on this project through 1996 and it has been completed at approximately $2.0 million less than the 1986 estimated cost. Federal funding of approximately $5.6 million and State funding of approximately $8.9 million have been received for this project for a total of $14.5 million. Approximately $4.0 million in State audit exceptions are currently being contested by the District and have yet to be resolved. An additional $14.7 million is needed to address other problems on Uvas Creek.

Lower Llagas Creek PL-566 - This project was included in the 1981 flood control program, and continued in the 1986 program with a cost of $10,692,000 and completion in 1989. Expenditures of $14,995,641 have been incurred on this project through 1996 and the project is substantially completed. Federal funding of approximately $15.5 million and State funding of approximately

$19.3 million have been provided for this project. The schedule delay was due primarily to insufficient federal and state appropriations. $339,000 is included in the Draft 1998-99 CIP for this project

Upper Llagas Creek PL-566 - This project was included in the 1981 flood control program. This project was continued in the 1986 program with a remaining cost of $12,164,000 and completion in 1992. Expenditures of $9,089,349 have been incurred on this project through 1996. Funding of approximately $6.2 million has been provided to date by the State for this project. Insufficient federal appropriations for the PL-566 program has significantly delayed the project. The delay in the schedule has made the project more complex and more costly due to more stringent regulatory requirements and escalated real estate values. Assuming adequate funding level for the PL-566 program, the upper Llagas project is now scheduled to be completed in 2011. The District is scheduled to spend an additional $14.6 million for right-of-way acquisition, bridge construction and utility relocations as the local share on this project. These local costs are eligible for 100% reimbursement from the State and the South Zone is dependent on periodic reimbursements from the State to complete this project. Additional flood control work will be needed which was estimated in 1995 at $14.6 million

Tennant Creek - This project was added in the 1986 program with a cost of $12,084,000 and completion in 2019. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Additional flood control work will be needed which was estimated in 1995 to cost at least $3.5 million.

Jones Creek - Expenditures of $20,254 have been incurred on this project through 1996. Funding for this project has not yet been identified. Additional flood control work will be needed which was estimated in 1995 to cost at least $4.1 million.

Dexter Creek - This project was added in the 1986 program with a cost of $814,000 and completion in 1998. No expenditures have been incurred on this project through 1996. Funding for this project has not yet been identified. Additional flood control work will be needed which was estimated in 1995 to cost at least $0.8 million.

Llagas Creek (Santa Teresa to Chesbro Reservoir) - This project was added in the 1986 program with a cost of $3,258,000 and completion in 2002. Expenditures of $7,605 have been incurred on this project through 1996. Funding for this project has not yet been identified. Additional flood control work will be needed which was estimated in 1995 to cost at least $16.4 million.

Financial Summary

Capital projects have been identified in the South Zone which total $90.3 million as follows:

	Millions
Capital Project Expenditures from FY 1982 to FY 1996	$36.7
Capital Projects identified in the Draft 1998-99 CIP with current benefit assessment and bond authorization	0.3
Additional Flood Control Projects not funded with current benefit assessment and bond authorization	53.3
Total	$90.3

- **The Santa Clara Valley Water District (SCVWD) established Benefit Assessments under the 1982 Benefit Assessment Act, which allows the SCVWD to assess property for the cost of providing flood control benefits. As stipulated by the 1982 Benefit Assessment Act, prior to the second year of imposing the assessment, approval by a majority of the voters within the specified zone was required. All revenues derived from such assessments must be used to pay the costs of services or facilities, for which the assessment was levied, within the specified zone.**

- **An independent test of the Benefit Assessment Rates set by the SCVWD found that the methods and practices used by the District to determine and set Benefit Assessment Rates for each of the Flood Control Zones yielded results that are in line with the standards set by the Benefit Assessment Program.**

- **The SCVWD has established five Flood Control Zones, Central, East, Northwest, North Central and South, which cover most of Santa Clara County. Each zone operates as a separate financial entity, with specific projects funded by Benefit Assessments, until June 30, 2000, when the Benefit Assessment Program is scheduled to sunset. Extending the Benefit Assessment Program beyond June 30, 2000, now requires adherence to regulations imposed by the passage of California's Proposition 218. The impact of Proposition 218 and its impact on Benefit Assessments is included in a separate appendix to this report.**

- **The SCVWD currently has identified $191.1 million in future flood control projects, primarily funded with Benefit Assessments under the existing Program. In addition to funding capital projects, Benefit Assessments partially fund operating and maintenance costs for SCVWD flood control facilities. With the pending sunset of the Benefit Assessment Program, on June 30, 2000, the SCVWD must: 1) find a method of replacing the amount of revenues from Benefit Assessments that are not related to annual debt service requirements on existing projects; or, 2) devise a method of replacing funding of maintenance and operations currently supported by Benefit Assessments; and/or 3) reduce future flood control and capital projects, and potentially reduce maintenance and operations to minimum requirements.**

- **In order to maintain the required level of capital improvements related to enhancing and constructing flood control facilities, the SCVWD should: 1) investigate all methods of generating revenue; 2) determine a level of capital construction, related to flood control, that allows the SCVWD to maintain the integrity of the existing flood control system; 3) analyze current maintenance and operations expenditures in each zone to determine whether or not the current maintenance and operations programs should be reduced to reflect decreases in available funding; and 4) monitor the outcome of elections, held under the guidelines of Proposition 218, to determine its affect on deciding how to assess special benefits.**

Methodology

As part of this performance audit, HMR conducted a review and analysis of the SCVWD Benefit Assessment Program. This review and analysis included an evaluation of Benefit Assessment Election materials, voter mandates and expectations, and the Benefit Assessment rate setting process.

To conduct these analyses, we reviewed benefit assessment election materials prepared by SCVWD from 1981, 1986 and 1990. We also reviewed news coverage, interviewed staff involved in the election processes, correspondence from citizens and interest groups, and election results from the Santa Clara County Registrar of Voters Office.

Our analysis of the Benefit Assessment rate setting process included a review of benefit assessment rate setting procedures from the inception of Benefit Assessments in 1981 through the current rates set for Fiscal Year 1997-98. Such analysis included testing the rate setting process by independently projecting the FY 1997-98 rates for each classification of Property for each zone. Our independent projections and the rates set by the SCVWD were not significantly different. As such, we determined that the methodology and process used by the SCVWD is accurate and produces results that are in line with standards set by the Benefit Assessment Program.

Background

In 1979, Assembly Bill 549 (AB 549) passed, authorizing flood control districts to levy Benefit Assessments to fund the cost of capital construction, and maintenance and operation of flood control facilities. This legislation established the SCVWD's authority to establish Flood Control Zones, determine the benefit derived on a parcel by parcel basis and levy an assessment based on the proportional storm water runoff from such parcels. For the first year of the Benefit Assessment Program, Fiscal Year 1981-82, the SCVWD was allowed to proceed without the approval of the voters. However, in order to continue the Benefit Assessment Program past the first year, the approval of a majority of the voters in each of the Flood Control Zones was required.

The initial Benefit Assessment Program, approved by the SCVWD Board of Directors in June 1981, was to have had a duration of 10 years. As required by the AB 549, continuation of the Benefit Assessment Program past FY 1981-82 was placed on the June 1982 Ballot for all five of the Flood Control Zones. The measure to continue the Benefit Assessment Program passed in all five zones and thus the initial program, with an original sunset date of June 30, 1991, was approved.

As stipulated by AB 549, all revenues generated from the levies against properties in the Flood Control Zones were to be used to fund flood control activities. Such activities included the design and construction of flood control facilities and structures, maintenance of existing flood control facilities and structures, and ongoing costs associated with operating such facilities and structures. The revenue generated is administered as part of a large pool of revenue which comprises the Flood Control Special Revenue Fund for the SCVWD. However, the revenues can only be expended on projects within the zone from which the funds are generated. For example, money in the Special Revenue Fund that is identified as revenue generated from Benefit

Assessments levied against property owners in the South Zone cannot be used for operations, maintenance or capital projects scheduled to take place within the Northwest Zone.

As of June 30, 1996, the Benefit Assessment Program implemented by the SCVWD has collected $210.4 million in revenue from Benefit Assessments. Between Fiscal Year 1993-94 and Fiscal Year 1999-2000, actual and projected revenue collected from Benefit Assessments is estimated to average $20.1 million per year. With the impending sunset of the Benefit Assessment Program, on June 30, 2000, SCVWD may lose as much as $7.2 million per year in revenue from Benefit Assessments. This $7.2 million represents the difference between the average annual revenue collected from Benefit Assessments between FY 1993-94 and FY 1999-00, less 125 percent of the amount required to meet the annual debt service requirements on outstanding obligations ($20.1 million average annual revenue, less $12.9 million, or 125 percent of annual debt service, equals $7.2 million).

The Benefit Assessment Program, which was approved by the voters and implemented by the SCVWD, levies assessments based on:

- The cost of providing flood control services within the zone based on 1986 estimates for the Northwest, Central, East, and South Zones and 1990 estimates for the North Central Zone;

- The proportionate amount of storm water runoff related to an individual parcel of land which is determined by size and use; and,

- The cost of operating and maintaining flood control facilities within the zone, plus a proportionate share of administration, installation and improvement of capital facilities.

The Benefit Assessment Program also includes restrictions on increases in assessments, incurring long-term debt, and the length of the Program. These restrictions, which were imposed at the time of the elections, are:

- In all zones except the North Central Zone, the annual percentage increase in assessments rates cannot exceed the Bay Area Cost of Living Increase (BA CPI), or 2 percent;

- In the North Central Zone, the annual percentage increase in assessments cannot exceed the BA CPI;

- For a period of up to two years following a flood disaster, the annual percentage increase in assessment rates can exceed the BA CPI, to recover emergency flood fighting costs, but such rates must be adjusted to that level in the year following the flood disaster;

- Assessments cannot be levied beyond the year 2000 unless a debt or other obligation requiring repayment has been incurred; and,

- After June 30, 2000, benefit assessments cannot be levied in excess of 125 percent of the amount needed to fund the annual debt service obligation within each Flood Control Zone.

Similar restrictions on the manner in which Benefit Assessments could be levied and used in the North Central Zone were implemented in 1990.

Our review of programs in other California Flood Control entities did not reveal any programs that were as restrictive as the Benefit Assessment developed by SCVWD. For example, the Santa Barbara County Benefit Assessment Program does not sunset, and rates are adjusted annually based on the Consumer Price Index (CPI). The Riverside County Benefit Assessment Program, which is used to pay debt service obligations for projects in the Elsinore Valley, sunsets in the year 2017, while the Benefit Assessment Programs for areas with National Pollutant Discharge Elimination System (NPDES) programs do not have sunsets. Additional details on the parameters of Benefit Assessment Programs are contained in Appendix II that provides an analysis of the results of the survey conducted as part of this audit.

Formation of Flood Control Zones and Conducting Benefit Assessment Elections

Establishing Flood Control Zones

As previously noted, the SCVWD established five Flood Control Zones (Northwest, North Central, Central, East and South). Each Zone operates as a separate financial entity with a set of specific projects designed to mitigate damage from excessive storm water runoff. The SCVWD has the authority to levy assessments within each of these Zones and use such revenue to fund the cost of capital projects, maintenance and operations.

Initially, in 1981, assessments, which were based on property classifications, were set at the same level for all zones. The classifications of properties differentiated between: 1) commercial/industrial parcels; 2) apartments, schools and churches; 3) single-family residences; 4) utilized agricultural land; 5) vacant urban parcels; and, 6) vacant rural parcels. Unit rates were set based on the parcel's contribution to storm water runoff. This provided uniform rates and funding for each Zone. The amount of revenue generated by each Zone was dependent upon the number of parcels of real property within the Zone, the classification of the properties, and the extent to which the Zone was developed.

Individual flood control project plans were developed in 1981 and, implementation was begun for each Zone to suit the SCVWD's overall plan for mitigating damage from major flood events. Major flood events, occurring three times during the first four years of the Benefit Assessment Program, prompted the SCVWD to accelerate its plans to construct flood control projects. In order to accelerate these plans, SCVWD revised the planned projects in 1986, and proposed to increase Benefit Assessments levied against parcels of real property.

As previously noted, the initial rates for various classifications of property were uniform throughout the SCVWD Flood Control Zones. In revising the plans to construct and complete flood control projects and levy assessments against properties in 1986, the SCVWD developed rates that were specific to each Zone. These rates were based on the work that had to be completed and the severity of the flooding and flood damage repairs needed in each Zone. This change in the Benefit Assessment Program and the increase in Benefit Assessments was approved by the voters in the Northwest, Central, East and South Zones in November 1986. The voters in the remaining Zone, the North Central Zone, approved similar changes in the Benefit Assessment Program to continue its 1986 Benefit Assessments in June 1990.

Benefit Assessment Elections

The SCVWD has held a total of three Benefit Assessment elections. The first election was held to approve the Program established in 1981. The Benefit Assessment elections held in November 1986 and June 1990 for the North Central Zone, extended the sunset of the Benefit Assessment Program through June 30, 2000 for all five Flood Control Zones. At that time, the collection of Benefit Assessments will cease with the following exceptions. In the Northwest, Central, East and South Zones, no Benefit Assessments can be levied except to cover annual debt service and/or other obligations incurred as a result of debt authorized by voters prior to and including June 30, 1995. In the North Central Zone no Benefit Assessments can be levied, except to cover annual debt service incurred as a result of debt authorized by voters prior to and including June 30, 2000.

1981

In creating a Benefit Assessment Program in 1981, the SCVWD developed a brochure entitled Flood Control Benefit Assessment Program which included:

- A map showing each flood control zone;
- A description of how flood control services had been funded previously and how the enactment of Assembly Bill 549 authorized new methods of funding such services;
- A statement of the reasons assessments for flood control were needed which included maintenance, construction and land use management;
- A description of how the amount of the assessments were determined; and,
- Answers to the most commonly asked questions about the Benefit Assessment Program.

The election, authorizing the 1981 Benefit Assessment Program was held District-wide and passed with 74.2 percent of the voters approving the ballot measure.

1986

In 1986 the SCVWD went to the voters to seek authorization for debt financing of flood control projects and to establish differential rates for the flood control zones based on the needs within each area. This election took place after what the residents of Santa Clara County considered disastrous floods in 1982, 1983 and 1986. Even though information was provided to voters on the need for more flood control projects, we were unable to locate any document that specifically listed projects that would be completed within each zone, or a time frame for the completion of those projects. Despite the lack of specific details, no published argument against the Benefit Assessment Program ballot measure was ever submitted.

The 1986 election was held in all Flood Control Zones except for the North Central Zone. The ballot measure passed in each of the four Zones with a lowest approval rate (61.22%) in the East Zone and the highest approval rate (72.39%) in the Northwest Zone. With the passing of this ballot measure in the Northwest, Central, East and South Zones, the current Benefit Assessment Program was established. This program includes such limitations as: a sunset on the ability to levy Benefit Assessments in excess of 125 percent of annual debt service after June 30, 2000; the inability to request the authorization of additional debt after June 30, 1995; and, limits on the increase in assessment rates above the increase in the CPI, or two percent, unless there is a flood event which requires additional capital or maintenance expenditures as a result of damage to facilities.

1990

The 1990 election was held only for the North Central Zone. In preparation for this election, the staff of SCVWD prepared a document entitled A Proposal for Continuing the Benefit Assessment Program in the North Central Flood Control Zone. This document included a list of projects and a prioritization of such projects. However, the list of projects and the prioritization did not include projected completion dates. The SCVWD also prepared a brochure entitled Flood Control Benefit Assessment Program: North Central Flood Control Zone 1991 - 2000. The brochure also contained:

- A map showing all of the flood control zones with the North Central Zone highlighted;
- A description of how flood control services had been funded previously and how the enactment of Assembly Bill 549 authorized new methods of funding such services;
- A statement of the reasons assessments for flood control were needed which included maintenance, construction and land use management;
- A description of how the amount of the assessments were determined; and,
- Answers to the most commonly asked questions about the Benefit Assessment Program.

The brochure also included a list of the priority projects and informed the readers that the projects were 'planned for construction by June 30, 2000', but did not indicate when such projects would be completed. As with the 1986 election in the other four Flood Control Zones this election passed, but with only 52.83 percent of the voters approving the ballot measures. The same restrictions placed on the other four flood control zones were placed on the North Central Zone with the passage of this ballot measure, except that the deadline for obtaining voter approval to authorize additional debt financing. Unlike the other zones which had a deadline of June 30, 1995, the North Central Zone deadline was established as June 30, 2000.

The Impact of Proposition 218 on Future Benefit Assessment Elections

In November of 1996, voters in the State of California approved Proposition 218 which requires majority voter approval for all local general taxes and two-thirds voter approval for all local special taxes, and majority property owner approval for benefit assessments. When the fieldwork for this audit began, the actual impact of Proposition 218 on benefit assessments was not clear. However, on July 1, 1997, the Governor approved and signed Senate Bill 919, enacting the Proposition 218 Omnibus Implementation Act prescribing specific procedures and parameters for local jurisdictions in complying with Article XIII C and Article XIII D of the California Constitution.

Based on the passage and enactment of Proposition 218, the SCVWD has determined that the District would not be able to hold an election to continue its current benefit assessment, as Proposition 218 is a "constitutional amendment and supersedes all statutory acts, such as AB 549".[1] In fact, in the draft document prepared by the District, it states:

> "Proposition 218 limits the method of assessment to only those properties which receive a *special benefit*, as distinguished from general benefits to these and additional properties; further this *special assessment is* limited to the value of the special benefit. Simply put, the District cannot simply renew the existing benefit assessments nor establish similar assessments because the funding mechanisms are now at variance with California law."[2]

The District has identified several alternative funding mechanisms which would not require any challenge to Proposition 218. These mechanisms include development impact fees, permit fees, use of all available ad valorem property taxes, establishing a special tax and development of a storm water conveyance utility.

Since HMR focused primarily on benefit assessments, alternatives were developed that would require the District to devise a method of assessing special benefits and continue with the types of benefit assessment programs the public has approved in the past. Appendix I of this report, along with the District's Comprehensive Flood Management Project Phase I Report on Development of Baseline Programs and Alternative Funding Mechanisms, provides information on alternatives to the current SCVWD Benefit Assessment Program.

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[1] This assertion made by the SCVWD is contained in the Executive Summary of the Comprehensive Flood Management Project Phase I Report on Development of Baseline Programs and Alternative Funding Mechanisms Draft January .

[2] Ibid. ES-2.

Conclusions

The SCVWD Benefit Assessment Program has been the major source of funding for capital flood control projects. Our independent test of the Benefit Assessment Rates set by the SCVWD found that the methods and practices used by the District yield results that are in line with the standards set by the Benefit Assessment Program. With the impending sunset of the Benefit Assessment Program, the SCVWD will lose approximately $7.2 million in annual revenues that are currently used to support construction and maintenance activities related to flood control. In order to continue to meet projected capital requirements, an alternative to the sunset of the current Program or alternative sources of revenue must be sought.

If the SCVWD's preferred method of generating revenue requires an election, as would most new programs taking effect on, or before, July 1, 2000, there are three opportunities to place measures on general election ballots. These dates are November 3, 1998, November 2, 1999 and June 8, 2000. If an election is required and none of these dates is acceptable or can be met by the SCVWD, a special election could be scheduled to obtain the required voter approval. The SCVWD could also decide not to plan an election at this time and allow the current Benefit Assessment Program to sunset. If this action is taken the SCVWD should continue with its current plans to define projects, and promote more effective and informative dialogues with the public, and go to the voters at some point after June 30, 2000, with a comprehensive program designed to replace the revenues from the former Benefit Assessment Program.

Recommendations

In order to maintain an adequate capital construction program, the SCVWD should:

II.1 Investigate all methods of generating revenue available to the SCVWD including the possibility of redistributing monies from property tax and flood management fees, and implementing some fees for administering and enforcing District Ordinance 83-2.

II.2 Determine a level of capital construction, related to flood control, that allows the district to maintain the integrity of the existing flood control system and the costs associated with completing such projects. These projects should be the focus of the public education efforts in informing citizens and environmental groups of the SCVWD's need to replace Benefit Assessment revenue and how these projects are related to the SCVWD's environmental and flood control goals.

II.3 Monitor the outcome of any elections, held under the guidelines of Proposition 218, to determine its affect on deciding how to assess special benefits. This information should then be used to assist the SCVWD in shaping its majority protest and election processes in order to successfully address the provisions of Proposition 218, should the District determine that such actions are feasible.

Section III: Implementing Ordinance Administration Fees

- **In order to fund flood control activities, the Santa Clara Valley Water District uses revenue from Benefit Assessment Fees and ad valorem property taxes. The use of these sources of revenue is authorized by State law. The currently authorized Benefit Assessment Program is scheduled to sunset on June 30, 2000, resulting in the loss of approximately $7.2 million in revenue annually. For the Santa Clara Valley Water District to continue its current capital construction program, related to the development of flood control facilities and structures, alternative sources of revenue must be found.**

- **State law also allows the Santa Clara Valley Water District to charge fees for services provided to developers for land development review activities, and to contract with local governments within its jurisdiction for the provision of flood control services. Currently, the Santa Clara Valley Water District does not charge any fees to developers who seek land development review services.**

- **In order to replace a portion of the revenues that will be lost upon the sunset of the currently authorized Benefit Assessment Program, the Santa Clara Valley Water District should: 1) develop an equitable fee schedule for land development review services and implement a fee program in order to recover a portion of the costs incurred for providing these services; and 2) work with local governments within its jurisdiction to facilitate the administrative processes associated with the collection of such fees, and if necessary provide assistance in amending ordinances and administrative regulations that limit the local governments ability to collect and transmit such fees to the District.**

As discussed in Section II: Benefit Assessments, the impending sunset of the currently authorized program would result in a $7.2 million reduction in revenues, annually, from Benefit Assessments. In order to maintain the desired level of capital construction and flood control activity, the SCVWD must find a means of replacing a significant portion of this $7.2 million. With the passage of Proposition 218, restrictions on the manner in which fees and charges can be levied have been imposed.

One option, discussed briefly in Section II: Benefit Assessments, is providing flood control management services through contracts negotiated with the individual governmental entities within the SCVWD's jurisdiction. However, the SCVWD has not investigated this option and as such, does not have any information on the costs or benefits of entering into contract arrangements with these entities. Also, most of the local governments would more likely than not have to generate additional revenues to pay for contracted flood control management services, or reallocate existing resources. Consequently, we see few advantages to recommending contractual agreements at this time. A more viable option that does exist which could replace a portion of the $7.2 million in revenue that will be lost annually, upon the sunset of the Benefit Assessment Program, is to implement fees for services associated with the land use permitting process, under the administration of District Ordinance 83-2.

Fees for Administering District Ordinance 83-2

As stated above, one method of revenue generation that is available to the SCVWD is to assess fees for land development review services. Such fees would not be subject to regulation by Proposition 218 and, in 1991, were estimated to have the potential to generate approximately $850,000 in new revenue, annually. Based on 1990-91 budgeted expenditures of $1,448,000 for Ordinance Administration activities, $850,000 represented 58.7 percent of the cost of providing these services. To maintain the same cost recovery ratio, based on the 1997-98 budget expenditures for Ordinance Administration, such fees would have to generate approximately $1,313,558. The budget expenditures for Ordinance Administration, including costs associated with Source of Supply, Raw Water Transmission and Treated Water Transmission are shown in Table III.1 below with estimated revenues generated by fee category shown in Table III.2.

Table III.1
Ordinance Administration (83-2) Budget Expenditure
for Fiscal Years 1996-97 and FY 1997-98
by Benefit Assessment Zone

Zone	FY 1996-97 Budgeted Expenditures	FY 1997-98 Budgeted Expenditures	Dollar Change in Budgeted Expenditures	%
Northwest	$374,719	$436,612	$61,893	16.5
North Central	357,805	426,970	69,165	19.3
Central	400,319	453,142	52,823	13.2
East	406,479	459,084	52,605	12.9
South	316,726	365,527	48,801	15.4
GF Non-Zone Areas	55,429	96,413	40,984	73.9
Flood Control Zone Subtotals	**$1,911,477**	**$2,237,748**	**$326,271**	**17.1**
Source of Supply	$68,338	$96,766	$28,428	41.6
Raw Water Transmission	56,871	105,433	48,562	85.4
Treated Water Transmission	82,863	81,514	(1,349)	-1.6
Transmission and Supply Subtotal	**$208,072**	**$283,713**	**$75,641**	**36.3**
Ordinance Administration Total	**$2,119,549**	**$2,521,461**	**$401,912**	**19.0**

Source: Fiscal Year 1997-98 Santa Clara Valley Water District Budget

Since the adoption of the Fiscal Year 1997-98 budget, the SCVWD had implemented a policy change with regard to the allocation of expenditures for Land Development Review Services. According to staff, all such costs that can be attributed to water supply and distribution have been shifted from Flood Control to the Water Utility. However, this reallocation of expenditures has not altered the overall cost of administering District Ordinance 83-2.

As previously noted, Table III.2 below depicts the monthly revenues that would be generated based on Fiscal Year 1990-91 workload data. Revenues generated are shown using both the proposed fee schedule developed by District staff in 1991, and a proposed fee schedule, adjusted for inflation, developed by HMR in 1997. The fee adjustments shown in this table were set to reflect fees charged by other jurisdictions surveyed by the District in 1991.

Table III.2
Estimated Monthly Revenue that Could be Generated From Ordinance Administration (83-2) Based on 1990 Land Development Activities Identified by SCVWD Staff

Activity	Estimated Monthly Revenue FY 90-91	Estimated Monthly Revenue FY 97-98	Change in Estimated Monthly Revenue	Fee Charged Per Item FY 90-91	Fee Charged Per Item FY 97-98	% in Fees
Flood Insurance Letters	$ 650.00	$ 975.00	$ 325.00	$ 100.00	$ 150.00	50%
Flood Reports	400.00	600.00	200.00	200.00	300.00	50%
Local Drainage Forms and Letters	4,200.00	6,300.00	2,100.00	100.00	300.00	200%
Subdivision Applications (1)	21,500.00	35,000.00	13,500	$667.00	1,000.00	50%
Permit Applications	20,000.00	36,000.00	16,000	500.00	900.00	80%
Permits Issued (1)	24,500.00	40,000.00	15,500	460.00	2,000.00	335%
Extensions	200.00	300.00	100.00	100.00	150.00	50%
Resubmittals (2)	1,550.00	2,750.00	1,200.00	200.00	250.00	25%
Monthly Total (3)	**$73,000.00**	**$121,925.00**	**$48,925.00**			
Annual Total	**$876,000.00**	**$1,463,100.00**	**$587,100.00**			

Source: Santa Clara Valley Water District Fees for Land Development Review Services: June 6, 1991

(1) Based on the average of fees charged for various categories of activities for Review of Subdivisions and Permit Fees

(2)This represents the fee charged after a second submittal. After the third submittal, a fee, based on the average hourly rate for an engineer would be charged. for FY 1990-91 such rate was estimated at $100.00/hour.

(3) Totals represent best estimates for revenue generation based on the average number of items filed in each category on a monthly basis

As originally structured, the fees proposed by the SCVWD in 1991 would have generated enough revenue to recover 60.5 percent of the costs associated with administering District Ordinance 83-2. In order to recover the same percentage of costs, based on the FY 1997-98 budgeted expenditures, fees for these same services would need to generate approximately $1,353,838. The increases in fees, shown in Table III.2 above, would generate revenue to recover approximately 65 percent of the cost of administering District Ordinance 83-2.

Table III.3
Workload Statistics for 989, 1990 and 1996 as
Provided by SCVWD Ordinance Administration Staff

Ordinance Administration Activity	1989	1990	1996
Flood Insurance Letters	23	75	NA (1)
Flood Reports	29	25	48
Local Drainage Forms and Letters	189	155	NA (1)
Subdivision Applications (1)	417	364	250
Permit Applications	417	464	957
Permits Issued (1)	228	252	323
Extensions	13	15	NA (1)
Resubmittals (2)	456	593	NA (1)
Annual Total	**1,772**	**1,943**	**1,578**

Note: (1) These activities are no longer tracked as part of the Land Development Review Services. As such,
they have not been included in the estimated revenues that could be generated by implementing a fee program
for Land Development Review Services.

Table III.3 above, shows the changes in workload as well as changes in the tracking of District Ordinance 83-2 Administration activities. Despite the changes in activity as well as changes in the manner in which activities are monitored, the SCVWD may still be able to generate sufficient revenues to recover 60 to 65 percent of the costs of providing these services. Using the proposed FY 97-98 fee schedule in Table III.2, the SCVWD may be able to recover as much as $1.8 million as detailed below in Table III.4.

Table III.4
Annual Revenues that Could be Generated
Based on 1995-96 District Ordinance 83-2 Administration Activities

Activity	Revenue Generated
Flood Reports	$ 14,400
Subdivision Applications	250,000
Permit Applications	861,300
Permits Issued	646,000
Total	**$1,771,700**

It appears that the amount of revenue that could be generated from the activities that are currently conducted and monitored in Land Development Review Services are sufficient to recover over 65 percent of the District's costs. However, it should be noted that the estimated fees proposed for Subdivision Applications, Permit Applications and Permits Issued, are based on an average amount that would be charged based on the size of the development project. Consequently, the amount of revenue that could be generated from these three categories may be overstated. It is still reasonable to conclude that the District could generate between $1.5 and $1.8 million annually by implementing a fee program.

In conducting the analysis in 1991, SCVWD staff cited the pros and cons of implementing a District Fee program to recover a portion of the cost of administering District Ordinance 83-2. For the pros, staff cited equity, efficiency and cost recovery. The party or entity seeking to develop a parcel of land is solely responsible for creating the need for a development review process and receives a direct benefit from the services provided. As such, it is reasonable to assess a fee for providing review services that would recover, at least, a portion of the cost of said services.

Additionally, the current structure (free land development review) creates an inefficient process as there is no incentive for the party/entity requesting the review to make sure complete land development proposals are submitted. Staff cites instances of receiving land development proposals that are so inadequate that SCVWD staff is required to perform engineering analyses prior to going forward with the review. Submittal of incomplete land development proposals leads to increased work on the part of the SCVWD staff because of resubmittals. In 1990, of 2,084 items submitted for review, 593 or 28 percent, of those requests were resubmittals. Charging a fee for reviewing land development proposals as well as additional fees for Resubmittals could improve the quality and completeness of the documents submitted for review.

The cons cited by SCVWD staff included the cost of inflation, ordinance compliance and fee processing. Staff recognized that development fees were already high and that adding an additional fee would increase the cost of projects. If the cost of projects increases enough, staff believed the additional costs could result in problems getting developers to comply with the permitting process.

Staff also cited issues with regard to collecting and administering development related fees. The three options with regard to collecting such fees included: 1) having the District collect fees directly; 2) having the cities and County collect fees and remit the fees to the District; and 3) having the cities and County advise applicants of any fees that would be due to the District and suggesting that such fees be mailed or delivered. With the last two options noted above, the District could work with the jurisdictions to implement policies that would require developers to provide proof of payment of any SCVWD fees as a condition of obtaining required permits. Each of these options presented problems that would either impact compliance with District Ordinance 83-2 and consequently, the amount of revenue collected. When considered in conjunction with the cost of administering the fee collection, which was estimated to be approximately 10 percent of the revenue generated, the SCVWD decided not to implement a program to collect fees for Land Development Review Services.

The SCVWD would have to weigh the same pros and cons if fees for Land Review Development Services were implemented now. However, the potential loss of revenue, as a result of the sunset of the Benefit Assessment Program, and the need to identify resources to fund capital construction, maintenance, and operations activities, changes the financial circumstances faced by the SCVWD. We recommend that the SCVWD staff reconsider developing a fee schedule for Land Review Development Services and work with the local jurisdictions to devise a viable method of collecting such fees. Proper implementation of such a program could generate as much as $1.8 million in new revenue annually.

Conclusions

The SCVWD needs to investigate options that are available to generate revenue to fund capital projects, maintenance and operations. One such option is to begin charging developers fees for Land Development Review Services which are associated with the permitting process governed by District Ordinance 83-2. This type of cost recovery is not subject to the restrictions imposed by Proposition 218.

Santa Clara Valley Water District staff has investigated implementing such a program in the past. Due to difficulties regarding the cost and administration of a cost recovery program, and the potential increase in the cost of development, the SCVWD has not actively pursued this option. However, the impending sunset of the Benefit Assessment Program, and loss of $7.2 million annually makes this option worth investigating. Based on the most recent workload statistics and proposed fees which would generate revenues equal to approximately 65 percent of the cost of conducting these activities, as much as $1.8 million in Land Development Service costs could be recovered.

Recommendations

The SCVWD Board of Directors should reexamine its previous policy decision to forego implementing a cost recovery program for District Ordinance 83-2 Administration Services by establishing fees that would be paid by developers and others requiring Land Development Review Services. Additionally, in order to generate revenues that could be used to replace a portion of the $7.2 million that will be lost when the Benefit Assessment Program sunsets on June 30, 2000, the SCVWD staff should:

III.1 Develop an equitable fee schedule for Land Development Review Services.

III.2 Implement a fee program that will recover a portion of the $2.5 million in costs incurred by providing Land Development Review Services to developers.

III.3 Work with local jurisdictions within the SCVWD service area to facilitate the administrative processes associated with implementing such a fee program by: 1) working with the local jurisdictions to inform developers of the new fees for Land Review Development Services; and 2) devising a fee collection process that is easily administered and ensures maximum compliance with the new fee program.

Benefit

Implementation of this recommendation would produce annual revenues to the SCVWD in the amount of between $1.3 million and $1.8 million annually, depending on a policy decision by the Board of Directors concerning fees and the level of cost recovery.

Section IV: Capital Project Budgeting and Financial Tracking

- **Capital projects of the SCVWD have not been consistently defined so that the project costs and project benefits could be clearly justified, prioritized and reported to the District's managers, directors and the general public.**

- **Projects have typically been defined as the estimated cost of an individual contract to be awarded or the estimated cost of correcting a single problem within a larger drainage area. The benefits of capital projects (flood loss prevention), however, have typically been identified and quantified only for much larger projects or groups of projects.**

- **By defining major projects at a higher level and identifying flood loss prevention for every project, all projects can be justified, prioritized and evaluated in relation to other projects of the District resulting in improved decision making, project management and public understanding and support.**

Pursuant to our Management Audit work plan, we compiled an inventory of all flood control projects planned and implemented since 1981, by Flood Control Zone. This inventory is presented in Section I. In order to accomplish this inventory we scheduled and conducted interviews with key SCVWD staff that had been most actively involved with the planning, design and construction of flood control projects since 1982. During these interviews we identified the process by which projects are approved, planned and managed. During these interviews, we also identified the key documents of the District that contained details of the individual projects, and which were approved within each flood control zone since 1981. These documents included:

- Proposals and supporting data to extend benefit assessments dated January, 1981, July, 1986, January, 1990 and October 1995.

- Reports of Capital Planning and Construction revenues and expenditures from FY 1992 to FY 1996 prepared by the SCVWD Business Resources Group.

- SCVWD annual capital and operating budget documents.

Using these documents we compiled a list of all projects which had been approved since 1981 and of all projects against which expenditures were recorded since 1981. Many projects had similar but not equivalent project titles, project account numbers and/or descriptions to other projects which we had identified. Some projects had been divided into smaller projects for accounting or project management purposes then when they were originally proposed in benefit assessment plans.

We found that projects were initially identified in proposed benefit assessment program plans. Actual authority (appropriations) for expenditure of funds on capital projects, however, were based on approval in the annual budget of the District. Prior to Fiscal Year 1995-96, the capital budget of the District was included in the annual operating budget and appropriations were not carried forward except when encumbered, based on actual financial obligations of the District. Unencumbered and unexpended appropriations either lapsed or were reappropriated each year. Project numbers and project titles and descriptions were not always consistent and changes occurred from year to year. While expenditures could be identified with appropriations which had been approved in previous District budgets, the expenditure data on many projects could not be easily matched to projects which had been included in previous benefit assessment program plans. Also, projects had been approved in previous benefit assessment program plans for which no appropriations or expenditures could be clearly identified.

Projects were not consistently defined so that appropriations and spending could be tracked from 1982 to the present, and comparisons of actual to programmed costs could not be accomplished without substantial additional effort. In addition, due to the past District practice of budgeting for multi-year capital projects on an annual basis, budgetary controls for such projects were limited. Since no single dollar amount was approved for most projects, there is no basis for a comparison between cumulative Board Approved appropriations and cumulative actual expenditures.

Working within those limitations, we then scheduled additional interviews with SCVWD staff in order to identify the major projects for each flood control zone. The intent was to define projects of sufficient size to be generally recognizable and for which flood protection benefits could be quantified.

Significant observations during our analysis are as follows:

- From FY 82 to the present a total of 539 projects had been included in benefit assessment details or in SCVWD annual budgets or had accumulated costs.

- Based on a detailed review of these 539 projects, District staff determined that 492 projects could be considered as part of 59 major projects in the five flood control zones.

- Revenues of the District are recorded only by Zone and not by project. Therefore, the amount of reimbursements and/or cost sharing by other governmental entities on any individual project is not readily available. Past District budgets and benefit assessment program plans have not clearly identified sources of funding for individual projects. Therefore, comparisons of actual funding sources to planned funding sources are not always possible.

- Finally, estimated benefits (i. e., flood loss prevention) are often prepared only on major projects or reaches which may include many smaller capital projects. Therefore, comparison of actual costs of the smaller capital projects with projected benefits (flood loss prevention) could not readily be accomplished.

Meaningful comparisons between planned and actual results could not have been made for all individual 539 projects. We determined that in order to make any meaningful comparisons of actual costs to programmed costs it would be necessary to develop consistent project definitions. We then grouped each of the individual projects which had been included in previous benefit assessment program documents within the 59 major projects which were identified by SCVWD staff in the five flood control zones for purposes of our analysis. Then each capital planning and construction project, which had accumulated costs from FY 82 through FY 96, was merged into one of the 59 major projects of which it was a part. We then summed the programmed and actual costs of the individual project or projects which we had grouped together to form the 59 larger major projects within each flood control zone. This methodology allowed us to compare the total actual costs to date to the total programmed costs of each major project. While each individual project, which had accumulated costs, did not exactly match any individual project which had been approved, the total costs could be accurately compared to the total programmed costs of each major project.

We then reviewed each of the 59 major projects with SCVWD staff in order to determine the status of each project and to obtain information about significant deviations of actual costs and completion dates from projected costs and completion dates. The inventory of the major projects in each zone with programmed and actual cost information is included in Section I of this report.

For Fiscal Year 1997-98 the District has prepared a detailed five-year Capital Improvement Plan. This plan included capital projects for Fiscal Year 1997-98 and for four additional years through Fiscal Year 2002-03. This Capital Improvement Plan provides a description of each project, identified appropriations to each project for planning, design and construction, and anticipated sources of funding. This Capital Improvement Plan is a greatly improved budget and planning document and should be updated on an annual basis.

Past budgets and benefit assessment plan documents did not clearly identify assumptions as to the amount and availability of funding from other public and private sources. Therefore, anticipated funding sources for many past projects are not available. We reviewed schedules prepared by the SCVWD Business Resources Group of revenues by flood control zone. These schedules clearly identified the sources of the various revenues within each zone (Natural Resource Conservation Service, formerly the Soil Conservation Service, Corps, State, cost sharing, taxes, benefit assessments, etc.) but in most instances did not identify revenues to specific projects. Due to inconsistent project definition, as previously noted, and lack of detail on anticipated and actual state and federal revenues, it is also difficult to identify the net District cost of each individual project (total cost less cost sharing from other entities). Further, estimated benefits may not have been prepared based on the same project identification for comparison to the net District cost.

Currently, reports to the District Directors are prepared on a project by project basis for those projects which are currently active. Many of these projects are only a single contract or only a portion of a major project. While the reports on these individual projects contain useful management information and fully explain the status of the project, they do not clearly report how the status of each individual project relates to and/or changes the status of the larger major project of which it is a part. Reports to the District Directors should include the following information on all major projects which are currently in process.

- Estimated cost of planning, design, construction and total cost.
- Actual costs of planning, design, construction incurred to date.
- Anticipated sources of funding from other sources.
- Actual revenues from other public and private agencies to date.
- Any changes in estimated costs or revenues from estimates based on completion of planning, completion of design, engineers estimates, receipt of bids or change orders in excess of the approved project contingency.

Conclusions

The lack of consistent capital project identification does not allow accurate and meaningful comparisons of actual costs to budgeted amounts or the amounts estimated at the time benefit assessments were established.

Actual revenues are not readily available on each project to allow the District to compare the net District cost of each individual project with its benefits.

Consistent and accurate information as to the net District cost and estimated benefits of each project is needed so that each capital project can be clearly justified, prioritized and reported to the District's managers, directors and the general public.

Recommendations

We recommend that the SCVWD management and staff:

IV.1 Use a consistent project identification for each major project, until it is completed, in budgets, capital budgets and reports to managers and directors of the District. Identify project benefits (flood damage reduction) for all major projects.

IV.2 Include information on the availability of state and federal funding by smaller project that are part of the identified major project within each zone in budgets.

IV.3 Modify the account structure as may be needed to account for individual contracts or smaller project segments and yet combine them with other individual projects which are a part of the same major project for reporting purposes.

IV.4 Recast prior years' data on currently active projects to reflect this new project identification.

IV.5 Update the District's detailed five-year Capital Improvement Plan on an annual basis.

Savings/Benefits

By defining major projects consistently and at a higher level and identifying flood loss prevention for every major project, each project can be justified, prioritized and evaluated in relation to other projects of the District resulting in improved decision making, project management and public understanding and support.

Section V: Addressing the Costs of Environmental Regulation to the District

- **The Santa Clara Valley Water District carries out its flood control function under environmental oversight from Federal and State agencies, and under the scrutiny of numerous local environmental and homeowner groups.**
- **Interviews with regulators and environmentalists indicate that the level of scrutiny has increased in recent years, and District records show instances of significant project time delays and additional costs as a result. Furthermore, environmentalists stated that they believe the District should take additional steps to demonstrate its environmental stewardship of local streams and wetlands. Such costs were largely unforeseen in the early stages of project planning after the initial 1981 Benefit Assessment Election. These additional costs should be included in District estimates of project costs both in planning individual projects, and in formulating a work plan to be financed by future revenues.**
- **By including more detailed information on these costs in project planning, the District will more accurately forecast individual project costs, and will be better able to predict what projects can be built from future revenues. Providing this information also will enhance the public's ability to evaluate costs and benefits of this spending for future flood management program financing.**

Background

In carrying out maintenance and operations of existing flood control facilities and building new flood control facilities, the Santa Clara Valley Water District must account for the effects of these projects on the environment. It does so under the regulatory oversight of several State and federal regulatory agencies, including the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the San Francisco Bay Regional Water Quality Control Board and the California Department of Fish and Game. This overview of the regulatory processes the District faces is based on interviews with representatives of the oversight agencies and review of laws, regulations and other documents.

All of these agencies comment on environmental documents prepared by the District under the California Environmental Quality Act (CEQA) or National Environmental Policy Act (NEPA). Both acts require preparation of documents identifying significant environmental effects of District projects, alternatives to those projects and ways to mitigate the effects. These agencies comment on the adequacy of the documentation of environmental effects, the adequacy of environmental measures proposed, and the feasibility of project alternatives. Environmental documents must be certified by the District as adequate before a project can proceed, and that judgment can be challenged by public agencies or members of the public through litigation.

Furthermore, each agency also has specific regulatory jurisdiction over the District under State or federal laws. The following chart shows each agency's jurisdiction, legal authority and functions.

Agency	Authority	Regulatory Functions
U.S Army Corps of Engineers	Federal	Under Sec. 404, Clean Water Act, regulates filling of "navigable waters of the United States," which includes creeks and wetlands. Under Sec. 10, Rivers & Harbors Act, regulates any activity affecting streams or other water bodies subject to tidal influences, including tidal stretches of creeks emptying into S.F. Bay. Regulates via nationwide permits for standard activities with minimal impact, or individual project permits. Both types of permits require environmental review, but project permits require a more formal review and public comment.
U.S. Fish & Wildlife Service	Federal	Responsible for evaluating impacts of District activities to wildlife protected under the Endangered Species Act. Most commonly reviews projects in consultation with the Corps under Sec. 404 permitting review. But the agency may require a separate review if it believes a non-Corps regulated Water District activity may result in "taking of an endangered species."
S.F. Bay Regional Water Quality Control Board	State, Federal	Under authority delegated to the states under Sec. 401, Clean Water Act, this State agency must certify that Water District projects comply with water quality standards in order for the Corps of Engineers to issue a Sec. 404 permit. In addition, under the California Water Code the regional board requires a permit for any activity requiring a discharge of waste into a water source. Alterations of streams, including maintenance activities such as sediment removal, are defined as discharges requiring a permit.

Agency	Authority	Regulatory Functions
California Water Resources Control Board	State	This agency does not normally directly oversee District projects, instead delegating that authority to the regional boards, as previously described. However, the state board is reviewing a water rights complaint filed by environmentalists and a local resource conservation District. This complaint stemmed from claims that the District's Guadalupe River flood control project would harm fish in the river, but goes on to more broadly address concerns about the effects of District activities on the river.
California Department of Fish and Game	State	Under Sec. 1601 of the Fish and Game Code, public construction projects impacting rivers, streams or lakes require negotiation of a "streambed alteration agreement," between the Water District and the Department describing steps to be taken to protect fish and wildlife resources while carrying out the project. Such agreements for construction projects are typically negotiated on a project-by-project basis. For maintenance and other routine District activities, memoranda of understanding are typically negotiated describing resource management practices for typical routine projects, without requiring separate agreements be negotiated each time work occurs.

In addition to these formal regulatory agencies, the District's performance regarding environmental protection is scrutinized by various local environmental organizations, including local chapters of the Sierra Club, the Audubon Society, CLEAN South Bay, Coyote Creek Riparian Station, and others. District actions regarding specific stream sections also may trigger concerns of homeowner associations or ad hoc groups of property owners and residents in the proximity of the affected streams.

A 1995 poll, conducted for the District by GLS research, indicates that District constituents are concerned with the environment and the effect of District activities upon it. Findings of the poll, which was based on interviews with a random sample of likely voters obtained from official voter files, included:

- 45 percent of those surveyed believed pollution of local streams and creeks was a very or extremely serious problem. Further, 56 percent of those surveyed felt the same about pollution of San Francisco Bay. By contrast, only 27 percent viewed flooding as a very or extremely serious problem.

- 43 percent of those surveyed said the District was doing only a fair or a poor job protecting local creeks and streams and San Francisco Bay from pollution, while 30 percent for creeks, and 25 percent for the Bay, said the District was doing excellent or pretty good. Further, 51 percent said the District's work in keeping creeks clean and free of litter and debris was only fair or poor, while 31 percent said it was excellent or pretty good. By contrast, the District received high ratings for its work in providing water supplies, ensuring water quality and safety, and in encouraging water conservation.

- 67 percent of those surveyed said flood control methods should be used that preserve the environment, even if they cost somewhat more.

Leaders of local environmental groups cited these survey results in our interviews, and have cited the surveys and public opinion regarding the District's environmental performance in lobbying District Directors on various issues. For example, the District's decision in 1996 to delay putting a benefit assessment measure to an election occurred after environmental group leaders said they would not support the measure without more information on the projects scheduled to be financed, and their potential effects on streams and wetlands.

Further, during a July 1997 dispute regarding the District's plan to reduce water releases into Los Gatos Creek in order to conserve drinking water for storage, environmental group representatives stated their belief that public perceptions of the action as harming fish in the creek could generate voter opposition to future funding measures. Because the Santa Clara County District Attorney's Office interpreted the District's action as a possible violation of the Fish and Game Code, the District subsequently reversed the decision to reduce water releases. However, the arguments used by environmentalists in this instance also indicate that environmentalists view the need for voter approval of future flood management program financing as an effective means to pressure the District regarding environmental matters.

The Effects of Changing Environmental Regulation

Our review of the regulatory framework the District faces included interviews with representatives of the major Federal and State agencies regulating District activities. All agreed that their scrutiny of District activities has increased in recent years and that regulations and their interpretation have tightened. For example, a new U.S. Army Corps of Engineer interpretation of Sec. 404 of the Clean Water Act, now under review by the Courts, had expanded Corps oversight to include virtually all District maintenance and construction work. At the same time, new State policies requiring no net loss of wetlands from regulated activities expanded State review of District maintenance practices.

The effect of increased regulatory scrutiny has been described in several District reports of increased costs and time delays as a result of regulatory reviews. Among the findings of these reports:

- The size of Engineer's Reports, prepared to comply with the District's establishment law, state environmental laws, public expectations and anticipated State and federal permit application requirements, has increased. These reports describe the need, location, general design, cost and financing method for projects. According to a Dec. 10, 1996 report to District Directors, whereas the 1978 Engineer's report for a 2.9 mile project on San Tomas Creek required 47 pages, the 1996 report for the 7.6 mile project on Adobe Creek required 361 pages, nearly eight times the documentation for a project only about three times the size in linear miles. Similarly, the Environmental Impact Report for Adobe Creek, at 131 pages, compared with the 84 pages required for a report on the 1977 Alamitos Creek project, or the 58 pages required for the 1983 Saratoga Creek project.

- The same report estimated the costs of planning work for the Adobe Creek project at approximately $3 million, and estimated the time spent at some 10 years from initial conception of the project to final adoption of project documents by District directors. The memo attributes about $1,000,000 of the cost and roughly three years of the time spent on project planning to extensive District efforts to work with City officials and homeowner groups near the creek to develop a project design that all would support, and to receiving public input on project documents. In interviews, several local environmental leaders praised the Adobe Creek process for the extensive public participation provided.

- A March 15, 1994 report described the cost and delays from modifications to a project on Calabazas Creek in Sunnyvale, Santa Clara and Cupertino. The report identified approximately $954,000 attributable to additional permit conditions imposed for environmental reasons by the Army Corps of Engineers, the cost of responding to Corps' requests for information and negotiating the new conditions, and hazardous materials investigations and disposal for the project. A chronology in that report also showed the Calabazas Creek permit taking approximately seven years. The chronology identified new Corps requirements for mitigation and monitoring plans, a request for analysis of creekbed sediments by State water quality regulators, and changes in Corps staff overseeing the project as reasons for the permitting delays.

- District maintenance of creeks and flood channels is conducted under multi-year permits and agreements with the U.S. Army Corps of Engineers and the California Department of Fish and Game. The District applied for a new permit in July 1994. Regulators' concerns about cumulative effects of District maintenance, issues regarding the effect of maintenance work on endangered species, and new State water quality policies requiring no net loss of wetlands from District activities have required the District to prepare a full environmental impact report and mitigation plan. The lengthy review initially required the District to seek a separate permit for a group of the most crucial projects, while deferring work on the standard permit. Subsequently, the District reports that delays in work on the Maintenance Environmental Impact Report have forced the District to seek individual permits for maintenance projects anticipated for the summer of 1998, and possibly in several subsequent years. Furthermore, the District is proposing to purchase land along San Francisco Bay for creation of new wetlands to mitigate the impacts of the 1997 routine maintenance work on existing wetlands. This mitigation for impacts of ongoing maintenance activities is a precedent-setting and potentially costly new regulatory requirement. SCVWD staff estimate that such costs could exceed $50 million for the next 10-year maintenance program.

While this responsiveness to environmental concerns has significantly increased costs, as identified here and in Section 1 of this report, regulatory officials and local environmental leaders also have praised these efforts by the District. Several environmental leaders cited the lengthy Adobe Creek planning process as an example of improved District responsiveness, and said it resulted in a project that local elected officials and most residents could support. Environmental group leaders also cited the Coyote Creek project as showing that the District, with sufficient land available, can produce a project design that provides sufficient flood protection without significantly damaging the environment or wildlife. Furthermore, officials of the U.S. Fish and Wildlife Service noted that it was the District that alerted them to the potential negative impact of flood control construction and maintenance activities on the California red-legged frog, triggering expanded efforts to learn about this endangered species' habitat and develop plans to limit the effect of District activities on it.

Despite their praise for these efforts, leaders of local environmental organizations stated in interviews that they believe the District's current efforts at environmental protection are still insufficient in relation to the effect of District activities on creeks and wetlands, and in relation to public concerns about the environment. Those environmental leaders generally suggested three additional actions by the District:

- The District should include language reflecting its commitment to protection of the environment as part of its mission under the State law establishing the District. The current mission statement reflects only control of flood and storm waters, and beneficial conservation of those waters as District missions, although District directors have adopted protection of the environment in District activities as a goal in other District documents. The Sacramento Area Flood Control Agency, Antelope Valley Storm Water Conservation and Flood Control District, and the Contra Costa County Flood Control and Water Conservation District have included references to environmental protection in codified mission statements.

- As part of its expanded mission, environmental leaders insist that the District pay for enhancement of streams and wetlands under its control, rather than simply mitigating environmental impacts of District projects as required by law. Additional spending, environmental leaders said, may include restoring streams to mitigate not only District activity, but degradation from previous development, with new and larger plantings of vegetation, for example. It also could include replacing some existing District facilities with new projects using new and less environmentally damaging methods to prevent erosion and provide flood protection. Environmental leaders also recommend the District spend more money on public education regarding environmental resources of regional creeks and wetlands, noting that the project generally considered most environmentally sensitive, Coyote Creek, provides little public access. The District reports that replacing existing facilities with new projects is likely to be a very low priority, considering that many new capital projects are currently projected to be unfunded in the foreseeable future, as discussed elsewhere in this audit report.

- Environmental leaders also want the District to more forcefully point out the effect of land use decisions by cities and the County on flood control issues. They noted that in some cases the District has been forced to build flood control projects with less sensitive designs because development occurred too close to creeks. Logically, development close to creeks also increases the need for the District to work with homeowners and businesses in designing new projects, lengthening the design and environmental review process. Environmental leaders attributed much of the success of the Coyote Creek project to its location in a less-developed area. Environmental leaders said the District must educate city councils and city planners on these issues, promoting building designs with fewer hard surfaces that provide runoff into streams and use of on-site retention basins and other measures to keep water on developed properties, allowing it to flow into streams more slowly, reducing the need for flood control projects. Environmental leaders also suggest that the District could tie money for creek enhancement projects, discussed above, to cities adopting development policies that mitigate flood hazards and would in turn necessitate less costly and environmentally disruptive District projects.

Whether to adopt these changes requested by environmental leaders is a policy decision for the District's Board of Directors. The significant increased cost of such actions would further strain District financial resources in the face of reduced Benefit Assessment revenues beginning in the year 2000. The previous descriptions of unanticipated costs and delays on projects as a result of regulatory changes and responding to community concerns does indicate that these issues must be addressed in future District planning. We believe it is unlikely, given the public opinion on environmental issues captured in the District polling, that there would be public support for efforts to reduce environmental oversight of District activities.

The District made some efforts in making the public aware of regulatory costs during its 1997-98 budget deliberations, requesting that staff prepare a list of all spending proposed for environmental concerns. The two-page list of projects totaled nearly $5.75 million. We recommend that the District include specific estimates for the cost and time required to address environmental concerns in its future planning, both by including a specific time and cost contingency factor for environmental issues in individual projects, and by including estimates of time and cost of environmental issues in any future estimate of projects to be funded by any future funding measure on properties within the District. Providing this information will make Santa Clara County residents and taxpayers aware of all costs they are paying for in financing District programs, and will demonstrate that the environmental benefits of performing specific actions or selecting certain project actions can significantly increase expenditures.

CONCLUSION

The Santa Clara Valley Water District carries out its flood control program under the oversight of State and federal agencies, and under the scrutiny of local environmental organizations. The degree of oversight and scrutiny of District activities has increased significantly in recent years, leading to incidents of unanticipated costs and project delays to address environmental issues. Also, it appears likely that the District will face increasing pressure to absorb even more such costs in the future. By explicitly including the costs and time required for environmental management in planning for individual projects and an overall program to be financed by future funding measures, the District will more accurately forecast project costs and timing, and constituents will be better able to evaluate costs and benefits of environmental measures as part of the flood control program.

RECOMMENDATIONS

It is recommended that the Santa Clara Valley Water District Board of Directors:

V.1 Direct District staff to include and separately report a factor for project changes and review needed due to environmental regulations in the cost and timing of all individual projects, so any costs and delays required are clearly understood by District directors and staff and the public.

V.2 Direct District staff to include the cost and time required by environmental regulation in planning of any future District flood control program to be financed by funding measures. These cost and time factors should take into account current trends to increase regulation of District activities, and they should be reported separately and clearly in proposed election documents.

BENEFITS

By including more detailed estimates of environmental costs and delays in planning for individual projects and for the overall flood control program, the District will be better able to forecast project costs and timing, and will more accurately predict what projects may be completed with future revenues. The public will also be aware of how this money is being spent in assessing the costs and benefits of the flood control program for purposes of voting on any future funding measures.

Section VI: Flood Zone Advisory Committees

- **The Santa Clara Valley Water District uses five zone advisory committees as a primary contact with the public and local officials on flood control policies, projects and budgets. These committees represent cities, unincorporated areas and the general public, and meet quarterly to discuss District issues and make recommendations to the District's Board of Directors.**

- **Improvements are needed in committee tracking of flood control project timing and budgets, review of the annual flood control budget, and communication with the Board of Directors. Furthermore, at large members and those representing unincorporated areas report little contact with their constituents.**

- **By improving the information provided to committee members, and improving communication of their work to the District's Board of Directors, the Advisory Committees will be better able to advise the SCVWD Board of Directors. In addition, changes in committee membership to provide representation from specific stakeholder groups would enhance the committees' role.**

Background

The Santa Clara Valley Water District maintains five Flood Zone Advisory Committees, one for each flood control zone. Each committee consists of one representative from each city in the zone, plus a representative of the unincorporated area in zones where that area exceeds 25 percent of the zone's area. Each committee also has one or more at large members representing the general public.

Each committee meets quarterly. However, due to the high degree of overlap in membership, the Central and North Central committees have chosen to meet in a single combined meeting.

As described in District Engineering Policies and Procedures 3-260, the committees "bring to the District the desires of the citizens of the communities they represent and aid in coordinating governmental projects. In addition, the Committee members carry information of District activities to their communities."

Duties of the Committees, described in Policy 3-260, are to:

- Review existing District policies regarding flood damage reduction activities and recommend changes in them to the Board of Directors. Where appropriate policies do not exist, the Committees recommend new policies to the Board.

- Review flood damage reduction projects and activities and make recommendations to the staff.

- Review flood damage reduction project priority schedules and recommend changes to the staff or recommend adoption by the Board of Directors.

- Review flood control zone budgets and recommend changes to the staff or recommend approval to the Board of Directors.

- Review and recommend alternative means of financing flood damage reduction activities.

To evaluate the committees' perceived success in carrying out these duties, we solicited information from all members of the five advisory committees. Our primary method was an extensive questionnaire, attached at the end of this section. While a few members provided written responses, in general the questionnaire was used to conduct a structured interview with each of the committee members. In addition to the questions asked of all Zone Advisory Committee members, they were offered the opportunity to make comments on issues that concerned or interested them. At the request of the East Zone committee, we used the questionnaire to conduct a focus group session with its members. We also attended each advisory committee's spring meeting. The remainder of this section describes the key observations we made based on this information.

Committee Tracking of Flood Control Projects Is Limited

Our questionnaire sought information on the committees' success in monitoring the progress of flood control projects. Committee members' responses are shown in the following table:

	Question	Yes	No
8c.	Does the information provided allow you to compare current project timing and cost relative to original project costs and timing?	9	16
9.	Are project cost delays or cost increases sufficiently explained to you by District staff?	14	11
10.	Have variations in projects from what was originally proposed in the Benefit Assessment elections of 1981, 1986 and 1990 been adequately explained to your committee?	9	16

As the table shows, only in Question 9 did a majority of committee members indicate the information they received was adequate. However, their responses to this question indicated that the information was not provided in a standard format, but in answer to specific questions. Several committee members said they would like to receive a periodic report, in a graphic format, showing the original schedule and budget for each ongoing project, what the progress to date has been, whether the project is ahead of or behind its schedule and budget, and why that occurred.

We recommend that such a report be prepared quarterly for each committee. The actual budget and scheduling status of each project should be shown in a graphic format, while the narrative should explain any variances, either positive or negative, between planned and actual spending and scheduling of each project. This reporting system will allow advisory committee members to track the progress of each project, and to easily report on that progress to other local officials and the general public.

This type of information is particularly important given the regular turnover that occurs in the advisory committees. Several newer committee members said they had some difficulty getting up to speed regarding the status of ongoing projects in their zones, because staff reports assumed knowledge of the history of a project. We recommend providing the most current of these new status reports to all new committee members as part of the handbook each advisory committee receives. That handbook also should include a list and brief history of all current projects in the new members zone, plus all projects completed within the past five years.

Committee Review of Flood Zone Budgets Is Limited

One of the main duties of each advisory committee, according to District Policy 3-260 is to "review flood control zone budgets and recommend changes to the staff or recommend approval to the Board of Directors.

This review and approval typically occurs during the spring meeting of each advisory committee. This year these meetings occurred roughly two to three weeks prior to the Board of Directors' final budget hearings in early June.

In interviews, and during the spring meeting itself, a number of advisory committee members expressed frustration with the budget review process. In fact, the South Flood Zone Advisory Committee declined to make a recommendation on the 1997-98 budget, because a majority of members believed they had insufficient information to do so. The East Flood Zone Advisory Committee considered similar action, but ultimately endorsed the budget.

Problems and issues we observed during this budget review process included:

- During the East Zone meeting, the committee received a revised set of worksheets replacing those provided in the agenda packet. Also, the report included no comparisons between the 1996-97 and 1997-98 budgets. The committee requested and received that information during the meeting. Furthermore, the East Zone's maintenance budget included an FY 1997-98 work plan as part of the meeting packet, which members were told at the meeting to ignore, because it was not accurate. No updated plan was provided.

- During the South Zone meeting, members asked about the maintenance budget, but no detailed breakdown was available. They also generally complained that the level of detail was insufficient for them to review the budget. Committee members also noted that revenue figures in the budget presentation and in a separate benefit assessment program review did not agree. Additional information was photocopied and passed out during the meeting. The District's Special Programs Engineer, who presented the budget, said the committee was requesting more detailed information than the Board of Directors had received, since the proposed District budget was still being finalized. Committee members also asked questions about District investment and borrowing policies and use of reserves, which staff struggled to answer. The committee ended up voting to make no recommendation on the budget because of insufficient information.

- During both the Northwest and Central/North Central budget reviews, members recommended, after lengthy discussion of cities' fee policies, that the District begin charging for land use review of impact of new development on flood control and water supply issues.

The specific question regarding budgets in our questionnaire was whether the amount of time spent on budget issues was minor, moderate or extensive. Of 23 committee members answering this question, 12 said a moderate amount of time was spent, while nine said a minor amount, and two said the amount was extensive.

However, 18 members also offered additional comments specifically on the budget process, with 10 making statements indicating the extent of budget review was insufficient, five stating it was sufficient, and four suggesting advisory committees should not even be involved in budget review, given their infrequent meeting schedule and limited advisory role.

Our conclusion is that committee members must receive more detailed information to make a meaningful line-item review of the budget, and must get it far enough in advance to review it. For example, maintenance budgets should include, for each watershed within the zone, more details about the maintenance program, either the specific stretches scheduled for maintenance and the type of maintenance planned, or at least an estimate of the number of linear feet or miles of work scheduled to be completed in the year for various maintenance functions. Similarly, more detail should also be provided on other budgeted items, such as descriptions of each of the items in the Operating Projects budget.

This recommendation assumes that the Board of Directors desires an advisory committee recommendation regarding the detailed proposed budgets for each zone. Several committee members suggested that the advisory committees may be more valuable in the budget process by setting broad priorities earlier in it.

Under such a revised process, the advisory committees would discuss their budgets during their February meetings. Staff would provide tentative estimates of coming year revenues, tentative schedules for capital projects planned during the coming year, and a tentative maintenance work plan, based on the current assessment of creek conditions and the amount of maintenance work accomplished to date in the current fiscal year. Using this information, the committee would discuss such broad issues as the ratio between budgeted capital and maintenance spending and whether to change it, the need to reduce proposed spending in one year to save money for future capital or maintenance projects, and whether proposed spending among various parts of a zone are equitable. This feedback could then be used by staff in preparing its proposed budget.

Based on the timing difficulties described by the District's Special Programs Engineer in getting timely budget information to the zone advisory committees under the current process, we recommend using the advisory committees in the future for the broader review of budget priorities just described, changing the existing description of their duties accordingly.

Committee Interaction With the Board of Directors Is Limited

As described in Policy 3-260, "the Committees bring to the District the desires of the citizens of the communities they represent, and aid in coordinating governmental projects." In practice, the committees' attempt to fulfill this function through their quarterly meetings, by taking specific actions on agenda items presented to them by District staff, by making recommendations in conjunction with those agenda items, and by general discussions, which are reviewed by the Board of Directors via advisory committee meeting minutes.

We asked advisory committee members three questions regarding their interaction with the Board of Directors, with the following results:

	Question	Yes	No
7a.	Do Board members regularly attend your meetings?	14	12
7b.	Would you describe their presence as valuable? Committee members interpreted this question as whether Directors should attend the meetings.	23	3
12.	Is a process in place to follow up on your Committee's recommendations to the Board?	5	21

As these answers indicate, most advisory committee members stated some concern regarding the lack of feedback they receive from District Directors. Regarding Director attendance, generally members of the North Central, Central and East zones said Directors regularly attend their meetings, while the Northwest and South zone members reported rarely having a Director attend.

However, committee members also cited some recent improvements in coordination by staff between the advisory committees and the Board of Directors. In both the East and South zone committees, staff now keeps a running list of recommendations and referrals made by the committee. At the end of the meeting, those items are summarized verbally, and a written summary is subsequently prepared and provided to each member. Staff has committed to respond to those items in subsequent meetings, including reporting on how committee recommendations were addressed by the Board of Directors.

Meanwhile, In the North Central and Central zone meetings, staff prepares a brief summary of key items discussed at each meeting and any recommendations, and provides it to committee members and District directors. This provides information on committee actions far in advance of formal committee minutes. For example, formal minutes of the Central-North Central committee meeting on Feb. 19, 1997 were not provided to the District Board of Directors until its July 15, 1997 meeting. A five-month lag between an advisory committee meeting and presentation of the minutes is too long a delay for the minutes to be an effective Advisory Committee-to-Board of Directors communication device.

These practices should be continued, and should be extended to all five advisory committees. In addition, Directors should regularly attend the quarterly meetings of the advisory committees.

Constituencies of Some Committee Members are Not Well Defined

Members are appointed to advisory committees by various means. Each City within a zone has a member on that zone's committee, and the city is generally represented by a City Council member, their designee, or a city staff member. All five zones have representatives from the unincorporated area, who are selected by the county supervisor representing that area and confirmed by the full Board of Supervisors. Each zone also has several at-large members, who are selected by the District's Board of Directors.

These variations in how committee members are appointed lead to variations in how they communicate with those constituents, and how they represent those constituents on the committee. We asked two questions in this area:

13. How do you get input on flood control from citizens in your community?

14. How do you communicate the information you obtain at Advisory Committee meetings back to your cities or constituents?

Most City Council or city staff members serving on the advisory committees said they were able to get input on flood control issues and provide information on District activities to constituents. City Council members said they received comments on flood control directly from constituents or via City staff, and reported on District issues to the public at City Council meetings or via written reports. City staff members serving on advisory committees said they got input from the public at Planning Department public service counters, through staff colleagues or through City Council comments and questions. City staff reported on District matters via memos or oral reports.

By contrast, of the 11 committee members interviewed who represented unincorporated areas or were at large members, three said they received no input on issues from the community, and eight said they reported to no one regarding their work with the District. This makes sense, because these members either do not represent specific geographic areas, or represent geographic areas that are not well defined communities, with the exception of the San Martin area.

The public contacts reported by unincorporated or at-large committee members were ad hoc in nature. One member reported getting feedback on flood control issues by sitting on a local sanitary district board, while another said they reported on District issues as a member of several environmental groups, and a third said flood control issues were regularly discussed with colleagues in several business groups. The few unincorporated and at large members who reported broader public contacts were generally those with the most committee experience.

These differences in constituencies also were reflected in our observations, during the spring meetings, of how various committee members approached their duties. City representatives were generally concerned with tracking the progress of any District projects in or affecting their city, and with making sure each city received an equitable share of District resources for maintenance work, as an example. The at large and unincorporated area representatives, were more concerned with broader policy issues, and brought with them perspectives shaped by their ad hoc contacts. For example, during the East Zone meeting, it was at large members who raised concerns about insufficient attention to environmental issues in the zone's budget and in prioritization of capital projects.

There are also minor inconsistencies in the make-up of one zone committee versus another. For example, the East Zone Advisory Committee has a designated Guadalupe-Coyote Resource Conservation District representative, whereas the South Zone, which includes the Loma Prieta Resource Conservation District, has no such dedicated seat, although its interest is generally represented by at-large members who are also Loma Prieta directors.

To address this issue, the District should formally seek representatives of specific stakeholder groups to fulfill the committee positions now filled by unincorporated and at large representatives. Stakeholder groups that should be represented include environmental groups, the local business community, and, in the South Zone, agriculture. Making sure these groups are formally represented on each committee will ensure that the proper range of representation is provided on each committee to both make recommendations to the Board of Directors and carry information on District activities to the community.

OTHER COMMENTS

In addition to the issues already described in this section, there were a number of other comments made by various advisory committee members or observations we made from the interview process. These issues, because they were not mentioned by most committee members, have not resulted in specific recommendations, but are nevertheless reported here for the edification of District staff and the Board of Directors.

Regional Differences

The key regional difference we observed among the advisory committees was between the views of South Zone Advisory Committee members and those of the other committees. South Zone committee members were in broad agreement that the District must be more aggressive in carrying out maintenance in creeks. In the South Zone, the concern is primarily vegetation removal. Whereas in other zones there were members who were concerned about balancing maintenance needs with environmental concerns, South Zone members also largely agreed that the District should be more aggressive in defending its routine maintenance program against requirements by regulatory officials and environmentalists that could cause delays. Our interviews with South Zone committee members suggest that their views largely reflect that area's status as a rural farming community, compared to the largely urban-suburban character of the other zones. One committee member in fact suggested that the merging of the former Gavilan Water District into SCVWD, by joining rural and urban areas in a single district, contributes to that frustration. District staff reports that they are aware of these concerns, pointing out that current work to secure a long-term permit for the District's maintenance program was started primarily because of a desire to reinstitute herbicide use in the South Zone.

District Meeting Staffing

Several committee members said the level of District staffing at advisory committee meetings is excessive. As one member put it: "The presentation is fine, but when there are 15 staff members and five committee members, I have to wonder what is going on. We only hear from about five staff members, and I know the others are there to answer specific questions, but I don't know if that's effective or not."

Subcommittee Election Participation

Several committee members said one area where the subcommittees could be put to better use than they have in the past is by providing advice and volunteer help to District staff and consultants in the event that there is a future benefit assessment election. According to these committee members, in recent benefit assessment elections, committee members, many of whom are elected city officials, have been asked to endorse benefit assessment measures, but have not been invited to take an active role in securing other endorsements or planning election strategy.

Subcommittee Member Disaffection

Finally, we note that two regularly appointed members of flood zone advisory committees stated to us that they had stopped or would stop attending committee meetings. One member stated that the concerns of the area the member represented were not being addressed through the flood zone committee process, while the other member stated the belief that the flood zone advisory committee process was not a useful one, and that District staff's efforts would be better spent directing information to the Board of Directors, as the elected officials with the authority and responsibility to make decisions for the District.

CONCLUSION:

Improvements are needed in tracking of flood control project timing and budgets, review of annual flood control budgets and communication to the Board of Directors by the Santa Clara Valley Water District's five flood zone advisory committees. Also, communication with the public by at-large committee members and those representing unincorporated areas appears limited. By providing more timely information to committee members, and having Directors attend more committee meetings and get better information on committee activities, these problems would be addressed. Also, appointing committee members representing specific stakeholder groups, rather than from unincorporated or at-large status, would ensure that a range of views are represented in each committee.

RECOMMENDATIONS:

It is recommended that the Board of Directors of the Santa Clara Valley Water District:

VI.1 Direct District flood control staff to provide a standardized quarterly report to each flood zone advisory committee, showing the schedule and budgetary status of ongoing projects versus original proposals.

VI.2 Direct District flood control staff to include the most current quarterly report, plus a history of ongoing projects, in the handbook received by all incoming members, as well as descriptions of all projects completed in the zone in the previous five years.

VI.3 Direct District flood control staff to conduct an annual review of broad budgetary priorities with each advisory committee during their February meetings, in place of the current formal review of the budget that now occurs in May.

VI.4 Direct District flood control staff to prepare summary lists of recommendations and referrals for all flood zone advisory committees, as some committee staff do now, and to provide a summary of major committee actions for the Board of Directors in advance of the formal minutes, as the North Central-Central Flood Zone Advisory Committee staff does.

VI.5 Attend flood zone advisory committee meetings, with each Director attending meetings in those zones the Director represents.

VI.6 Amend the current system of at large and unincorporated area appointees to have those appointees represent specific stakeholder groups, such as the environmental community, agriculture and local business groups.

BENEFIT:

Improved reporting on the status of flood control projects will allow advisory committee members to more easily track the status of those projects, and to more effectively report on project status to local officials and the public.

A broader annual review of budgetary priorities will allow each committee to more effectively participate in the budget process over substantive issues instead of reviewing budgetary details that are not provided in a timely manner.

Improved reporting to the Board of Directors on committee actions, and more frequent attendance at committee meetings by Directors, will improve communications between Directors and the committees, allowing for a clearer understanding of committee views.

Revising the committee membership to formally include members of stakeholder groups will ensure a broad range of views is representing on each committee.

- **In order to monitor capital projects, most entities develop a Project Tracking System that enables involved and interested parties to easily determine the status of a particular project and whether or not the project is in schedule.**

- **The Santa Clara Valley Water District Flood Control Division has developed a Project Status Report form with the intent of providing SCVWD staff with information on the status of various capital projects. However, the report is not useful for the Board of Directors or the Advisory Committees as it: 1) does not provide clear and concise information on the nature of the project; 2) is confusing with regard to total project funding requirements; 3) does not provide adequate information on the time frame of the status review and the amount of the total project which has been completed; and 4) does not provide complete explanations of variances in project schedules, or changes in the scope of projects.**

- **As a result, Flood Zone Advisory Committee members believe that the information provided: does not lend itself to time and cost comparison; and is not presented in such a manner or timed in such a way that it is useful in reviewing Flood Control Zone budgets and making budget decisions. Also, the general public, Board of Directors and Advisory Committees do not receive information that would allow them to easily identify flood control capital projects and: 1) determine on a zone by zone, or District-wide basis, how projects have been planned, scheduled and funded; and 2) the impact of changes in the scope, timing or cost of projects on District resources.**

- **In order to provide key decision makers with appropriate information the Project Status Reports should: 1) be simplified in terms of content and format so the General Manager, members of the Flood Zone Advisory Committees, the general public and members of the Board of Directors can easily determine the status of projects and the reasons for variances in cost and scheduling; 2) be produced on a monthly basis and distributed to the Board of Directors and Advisory Committee members at least one week prior to any meeting where status reports are discussed or reviewed; 3) become an integral part of the budget review process as well as the basis for the review of the District's Five-Year Capital Improvement Plan; and 4) serve as the basis for a standardized semi-annual report to each Flood Zone Advisory Committee which shows the schedule and budgetary status of ongoing projects against original cost and scheduling projections.**

Methodology

As part of the review of the flood control function, we reviewed and analyzed the District's process for monitoring, evaluating and revising capital projects. This analysis was performed to determine the degree to which the District was able to provide key decisions makers with information needed to make decisions regarding project planning, budget and personnel resource allocations, and generally, to keep them informed of the District's capital construction activities.

To conduct this analysis we obtained copies of 'Project Status Reports' on several projects for the period ending April 23, 1997, and Monthly Status Reports for the same period. These two reports are both prepared by the Flood Control Project Management team. The Project Status Reports serve as the internal documents used to track the status of all projects within the Project Management group. The Project Status Reports also serve as the basis for the Monthly Status Reports, which are distributed to the Board of Directors for discussion and decisions making purposes.

We also obtained information from Advisory Committee members through interviews, and gleaned information from our observations of the Fiscal Year 1997-98 budget proceedings.

Current Format for Project Status Reports

The Project Management Section of the District's Flood Control Division has developed a Project Status Report on capital projects which serves as the basis for the General Manager's Report to the Board of Directors. The Project Status Report provides information on project management, project costs, project scheduling including milestones and completion dates. Project management staff has recently revised the format of these reports. However, the information contained and the presentation have not changed substantially.

As previously noted, the information in the Project Status Reports does provide insight into the status of individual construction projects. However, the presentation of the information is confusing, does not provide a comprehensive view of major projects, and does not allow the reader to view key 'go' and 'no go' decisions on the current projects in context.

For each active operating and capital project the Project Management staff of the SCVWD prepare project status reports. These project status reports are updated on a monthly basis and contain information on each project which has approved funding. Information contained in these reports on each project is as follows:

- Project name and project number.
- Project description.
- Financial information: Prior and current years actual expenditures, project budget and estimated future cost.
- Status of each project compared to project schedule.

These reports are very detailed and are prepared for each project with funds budgeted in the current fiscal year. Often, the construction activities and the funds budget in the current fiscal year represent only a small segment of a large major project. Information on funding and expenditures since the projects inception, or future funding and expenditures, is not included in this report. Consequently, the report does not provide the reader with critical information on the impact of changes in the current activities on the entire project.

For example, the Project Status Reports we reviewed included one for the Berryessa Creek Core of Engineers from Calaveras Boulevard to Old Piedmont. The information contained in the status report did not provide any information on whether or not this is merely a portion of a major project, what percentage of the project has been completed, how much has been expended on the entire project since its inception, and when the entire project will be completed. Additionally, the reader is not provided with any information on the real impact of canceling or delaying the current activities. Answers to questions such as, "“will a decision to delay these construction activities substantially increase the costs for future segments of this major project?” or “will a decision to abandon these activities strand previous investments in the system?” cannot be answered with the information provided in the current Project Status Reports. By providing a critical issues review as part of the Project Status Report. This approach will enable Project Management staff, and other readers of the report, to evaluate projects from a broader perspective.

In order to provide the readers of these reports with more complete and meaningful information on the status of major projects the current reports should be revised to address the following critical issues for major projects and the individual projects of which they are comprised:

- The name of the major project in which the current construction activity is contained;
- The original cost estimate for completing the major project;
- Any revised cost estimates for completing the major project;
- Major impacts of changing, delaying or canceling the current activities such as increasing future construction costs, stranding previous investments, or compromising the integrity of the flood control system;
- An anticipated date for the completion of the current construction project as well as the entire project; and
- Total progress toward scheduled completion of the major project.

Providing such information would serve as a more complete presentation of the operating and capital activities undertaken by the SCVWD. Additionally, this information would provide the proper context for reviewing the impact of project delays and changes.

Monthly Status Reports to the General Manager

The Project Management Section also provides a copy of the Monthly Status Report, which is put forward by the management groups of the SCVWD for the General Manager. This report is then forwarded by the General Manager to the Board of Directors. These reports provide a listing of all projects of the District. For each project the reports contain the following information:

- Project name and project number;
- Summary budget page number;
- Explanation of the project;
- Goals and objectives of the project; and
- Measurable Tasks and Completion Dates.

Each monthly report repeats this information for all active projects of the District. New or revised information in these reports are presented as underlined and *italic* text so changes can be easily identified.

While these monthly reports provide a brief description of the project, its purpose, and status compared to the projects schedule, the format of the report and amount of detailed contained in the report is not suitable for the Board of Directors nor the members of the Flood Control Zone Advisory Committees. Despite the amount of detail contained in these Monthly Reports, they do not include any information on amounts expended compared to budgeted amounts for either the current fiscal year, or for the life of the project. Additionally, this report does not present needed information on how each project relates to and/or impacts other District projects.

These reports also fail to provide summary information which groups the smaller projects within each major reach and compares the amounts budgeted, expended and future cost projections with projected project benefits. As such, the Board of Directors and the members of the Flood Control Zone Advisory Committees do not have the information needed to: 1) understand the impact of decisions that are made regarding funding and scheduling of individual construction activities; 2) view the individual projects as part of an entire system which has been designed to provide flood control for the entire zone or other geographical subset of the District; and 3) make fully informed decisions regarding the prioritization, and proposed scheduling and funding of projects identified in long-range plans.

For example, decisions to delay, or abandon a specific stage of major project such as the Guadalupe River may have a significant impact on funding, regulations that must be met in order to comply with environmental regulations, and the ability to complete other phases of the Guadalupe River project that have been scheduled. In its current format, the Monthly Status Report does not clearly explain to the Board of Directors, members of the Flood Control Advisory Committees, or the general public that the segment of the Guadalupe River Project from Woz Way to Highway 280 is one small segment of a major flood management system. The report also does not indicate whether the delay of this segment of the Guadalupe River Project has any impact on other projects within the Central Flood Control Zone.

At the request of the Board of Directors, the format and content of these Monthly Status Reports has changed substantially. The new Monthly Reports on Key Projects Responding the Board Priority Issues, is a much abbreviated version of the original report. The new reports are formatted much like the Project Status Reports. As such the report lists:

- The Priority Issue identified by the Board of Directors;
- The purpose of the project;
- The name of the project and project manager;
- The project number and the page number where the project is discussed in the current budget document;
- Major Milestones which identify the activities funded in the adopted budget, and Other Major Millstones listed in the project plan;
- Original and adjusted completion dates; and,
- Explanations of variances in the schedule if appropriate.

However, the new format still does not contain any information on the cost of the current activities nor the amount of funding required to complete the project and clear identification of budget revisions. The readers, who are primarily members of the Board of Directors, still do not have adequate information to provide a context for any near-term decisions they may need to make regarding the current project activities. As previously noted, such context is important for decision makers to truly understand the impact of any decisions that are made.

In order to provide the Board of Directors and the members of the Flood Control Zone Advisory Committees with better data to make informed decisions regarding operating and capital projects, the Monthly Reports on Key Projects should be revised. In revising these reports, SCVWD staff should include the following information:

- Clearly identify the major project of which the current activities are part (*e.g. Explain that the Guadalupe River Flood Control Project is comprised of three major projects and that the Hedding Street to Coleman phase is part of the Central Guadalupe Project which is, or is not, integral to the entire Guadalupe system*).
- Identify funding sources and amounts for the key project as well as the major project of which the key project is part (*e.g. estimated costs for completing the Hedding to Coleman phase of the Guadalupe River Project is $2.8 million, with total Guadalupe River Project costs currently estimated at $245.8 million*);
- An estimated completion date for the major project (*e.g. based on the current schedule, the Central Guadalupe Project should be competed by June 30,*

2008, and the entire Guadalupe River Flood Control Project, as currently identified is scheduled to be completed by June 30, 2017); and

- Clearly articulated impact statements on the effect of delaying or abandoning specific phases of the major project (*e.g. further delay of the Hedding to Coleman phase of this project would result in an estimated cost increase of 15 percent, or $350,000, for the current activities and cost increases of 25 to 30 percent, or $583,333 to $700,000, for the remaining phases of the Guadalupe River Flood Control Project*).

By providing such information, the Board of Directors would be able to better understand the impact of delays, make better decisions on the allocation of resources to such projects and have a better long-term view of the impacts of project funding and scheduling on future phases of project planning and construction.

Additional Reporting Needs

In order to provide a comprehensive evaluation of all projects that are currently being undertaken, the SCVWD should prepare semi-annual reports that include the status of each project with funding in the current fiscal year. The information in the report should include any revisions to the project funding, scheduling, or elements that have resulted from decisions made by the Board of Directors, Project Management staff, or state or federal funding sources. By preparing and issuing such a report on a semi annual basis, the District would be able to not only provide the General Manager, Board of Directors and members of the Flood Control Zone Advisory Committees with valuable information, but could also inform the general public of: 1) the progress on capital projects; 2) key issues facing the District with regard to flood management; and 3) basic information on how flood management resources are being allocated and expended.

The semi-annual report could be patterned after the Project Status Reports, but contain more of a narrative description of the funded project and its relationship to any major project or "flood management system" that would be easily identified by the reader. For example, the information on the Berryessa Creek Core of Engineers Project from Calaveras Boulevard to Old Piedmont could be expanded to provide a one or two sentence description of the major projects affected by this segment of construction. Also included would be any critical issues and a recap of the costs of the project from its inception, projected cost for the completion of the project, proposed completion dates for phases and the project as a whole and any other projects that are connected or impacted by the Berryessa Creek Core of Engineers Calaveras Boulevard to Old Piedmont Project.

Release of this type of report should be timed to facilitate the budget planning and development process and to provide overview information on projects for inclusion in the District's annual report. This would support the project scheduling and review process as well as the process of updating the District's Capital Improvement Plan. With this type of ongoing review and status reporting, all interested parties, whether Project Management staff, Advisory Committee members, Board members, or the general public can be easily apprised of the District's capital construction activities and flood control management plans.

Conclusions

In order to monitor capital projects, most entities develop a Project Tracking System that enables involved and interested parties to easily determine the status of a particular project and whether or not the project is in schedule.

The Santa Clara Valley Water District Flood Control Division has developed Project Status Reports and Monthly Reports on Key Projects Responding to Board Priority issues with the intent of providing SCVWD staff and Directors with information on the status of various capital projects. However, the reports are not adequate decision making tools for the Board of Directors or the Advisory Committees as they: 1) do not provide clear and concise information on the nature of the project; 2) are confusing with regard to total project funding requirements; 3) do not provide adequate information on the time frame of the status review and the amount of the total project which has been completed; and 4) do not provide complete explanations of variances in project schedules, or changes in the scope of projects and the impact of such changes.

As a result, Flood Control Advisory Committee members believe that the information provided: does not lend itself to time and cost comparison; and is not presented in such a manner or timed in such a way that it is useful in reviewing Flood Control Zone budgets and making budget decisions. Also, the Board of Directors and Advisory Committees do not receive information that would allow them to easily identify flood control capital projects and determine on a zone by zone, or District-wide basis, how projects have been planned, scheduled and funded, nor the impact of changes in the scope of projects on District resources.

In order to provide the key decision makers with appropriate information the Project Status Reports should: 1) be simplified in terms of content and format so the General Manager, members of the Flood Control Advisory Committees and members of the Board of Directors can easily determine the status of projects and the reasons for variances in cost and scheduling; 2) be produced on a monthly basis and distributed to the Board of Directors and Advisory Committee members at least 14 days prior to any meeting where status reports are discussed or reviewed; 3) become an integral part of the budget review process as well as the basis for the review of the District's Five-Year Capital Improvement Plan; and 4) serve as the basis for a standardized semi-annual report to each Flood Control Zone Advisory Committee which shows the schedule and budgetary status of ongoing projects against original cost and scheduling projections.

Recommendations

We recommend that the SCVWD staff:

VII.1 Further modify the report format of the Monthly Status Reports to the General Manager to group the smaller projects into the major projects of which they are a part. This report should provide summary information on past expenditures, actual and budgeted expenditures on all current projects, most recent estimates on all future projects and estimated benefits of each major project within each flood control zone.

VII.2 Identify each major project which is currently active and prepare estimates of the benefits (flood damage reduction) for each major project as recommended in Section IV and provide Monthly Status Reports on each project.

VII.3 Include information on the impact of delays of current activities on the major projects, including, but not limited to, funding requirements, additional regulatory requirements, potential for stranding previous investments, and delays of future activities.

VII.4 Provide the information from the Monthly Status Reports to members of the Flood Control Zone Advisory Committees as well as the members of the Board of Directors, and begin the practice of preparing a comprehensive semi-annual report on the status of all projects which can be used as the basis for revisions of the Five-Year Capital Plan, and as a tool in annual budget planning and deliberations.

Benefits

Improving the structure and content of the Monthly Project Status Reports and Reports on Key Projects will ensure that information which is provided to the General Manager, members of the Flood Control Zone Advisory Committees, and the District Directors, results in improved decision making, project management and public understanding and support for the activities of the District.

Section VIII: Survey of Flood Management Practices in the Santa Clara Valley Water District and Comparable California Flood Control Districts

Pursuant to the Management Audit work plan, we conducted an extensive survey to compile detailed information on flood management practices of the Santa Clara Valley Water District and comparable California flood control districts.

Methodology

With the assistance of District staff, a 40-question survey instrument was prepared and distributed to 10 agencies in the last week of June 1997. Flood control agencies in Alameda, Fresno, Los Angeles, Orange, Riverside, Sacramento, San Bernardino, San Diego, Santa Barbara and Ventura counties received the survey. After repeated contacts, eight counties (Los Angeles, Orange, Riverside, Sacramento, San Bernardino, San Diego, Santa Barbara and Ventura) responded to the survey with printed answers to the questions, and in some cases, supporting documents. In many cases, follow-up interviews were also conducted to clarify jurisdictions' responses.

The remainder of this section discusses what we believe are some of the more interesting or important comparisons obtained from the survey. The detailed survey responses follow this section, starting with the SCVWD's response, and a summary of the responses of the other agencies (Appendix I), followed by the detailed individual responses from the other agencies (Appendix II). We have also provided District staff with the supporting documents provided by the responding agencies.

Recent District Growth

Six of the eight jurisdictions responding were able to answer a question regarding the miles of channel improved since 1980, which was an attempt to determine recent growth in flood management activities. To provide a basis of comparison, we converted the miles of channels improved by each jurisdiction to a percentage of total improved channel mileage. The results showed a marked contrast between agencies serving largely developed regions versus those where recent population and housing growth has occurred. Whereas Orange and Santa Barbara counties reported only 7.6 percent and 1.7 percent of their improved channel mileage, respectively, has been constructed in the last 17 years, Riverside County reported building 25 percent of its improved channels in that time, and San Bernardino County reported constructing 51 percent of its improved channel mileage. The average among the six reporting agencies was 17.79 percent of channels improved during the 17-year period. SCVWD staff reported only the total miles of channels or creeks under agency control as 650 miles. The District's 50 miles of improvements since 1980 thus represent 25 percent of total improved channel miles, in excess of the percentage of improved mileage among the agencies surveyed, and comparable to the Riverside County percentage. The high percentage of recent improved channel mileage in Santa Clara, Riverside and San Bernardino counties probably reflects their rapid urbanization since 1980.

Local Environmental Policies

According to the survey responses, three of the eight responding agencies, Los Angeles County, San Diego County and Orange County, have environmental policies or guidelines in addition to the requirements of State and federal environmental laws. Los Angeles County has Environmental Document Reporting Procedures and Guidelines adopted by the Board of Supervisors. San Diego County has a Resource Protection Ordinance that addresses the effects of projects, including flood management projects, on the environment. Two agencies, the Sacramento Area Flood Control Agency, and the San Diego County Flood Control District, also reported that improvement or protection of the environmental was among agency missions or goals. Sacramento incorporated this goal into the act establishing the agency, while San Diego reported it as a goal of the agency in its survey response.

Orange County officials indicated that they have adopted internal policies exceeding mandated environmental protection requirements on a case-by-case basis for selected projects in certain watersheds. That county also was the only agency reporting stream restoration efforts in excess of what State and federal regulations require, noting that selected areas identified as open space or recreation corridors have specific creek restoration or habitat enhancement goals.

Among the other respondents, San Bernardino County noted that under federal environmental law, it was required to develop a habitat conservation plan for the endangered Stephen's Kangaroo rat.

Also, Santa Barbara County reported that, like the Santa Clara Valley Water District, it has addressed meeting environmental regulations by developing a maintenance program environmental impact report, which addresses District activities as a whole and develops ongoing management practices, as opposed to seeking environmental review and approval of District activities on a case-by-case basis.

Maintenance Policies

One of the seven responding agencies, the Sacramento County Flood Control Agency, reported that it has no direct maintenance responsibilities, which are borne by the smaller levee maintenance agencies that comprise this joint powers agency. Of the remaining seven respondents, two, Orange County and San Diego County, reported that all improved channels are routinely cleaned of vegetation and other obstructions at least once a year. Orange County indicated maintenance in some channels occur twice a year. The other respondents said channels are maintained as needed in order to maintain their designed level of flood protection. The seven respondents indicated that both mechanized equipment and herbicides are used to remove vegetation and other obstacles. However, four of the seven reported in their responses that the use of these measures is to some extent limited by State or federal environmental regulation, an issue that the Santa Clara Valley Water District is also grappling with.

Only one of the seven respondents, Santa Barbara County, reported that privately-owned creeks are maintained, in situations where access is required and there is "a compelling regional benefit" to maintenance. A spokesman for that agency noted that this policy is now being reviewed.

Also, four of the seven agencies reported using a computer software package to schedule annual maintenance, as does the SCVWD. Five of the seven said they evaluate maintenance productivity against established standards, as will SCVWD through implementation of its maintenance management software program.

Benefit Assessment Issues

Five of the eight respondents, Los Angeles, Riverside, Sacramento, Santa Barbara and Ventura counties, levy benefit assessments based on proportionate stormwater runoff, as does SCVWD. The most significant difference between these agencies and SCVWD is that their assessments are either levied for a specific limited project, or were established without a sunset date. As a result, these agencies do not face the problem the SCVWD faces regarding approval of a new benefit assessment under rules established by Prop. 218. Ventura County, in its 1997-98 benefit assessment report, stated that "Proposition 218 is being interpreted such that, as long as the assessment rates and methodology remain the same from year to year, the requirements of the proposition are not triggered." Santa Barbara County also reported that its benefit assessment program, last authorized by voters in 1996, also has no expiration date, consequently no further voter authorization is needed. Riverside County has an ongoing benefit assessment for the National Pollution Discharge Elimination System (NPDES), which controls stormwater pollution, and a separate benefit assessment, scheduled to expire in 2017 for specific capital projects in Lake Elsinore.

The responding agencies that have benefit assessments also vary in calculations for the basic assessment unit (BAU), and how that basic unit, a single family home, relates to other development types in terms of the assessment charged. For example, the lot size for one BAU is 7,200 square feet in Riverside County, 8,712 square feet in Ventura County, 10,980 square feet in the Santa Clara Valley Water District, and 13,068 square feet in Santa Barbara County. The smaller the definition for one BAU, the higher the assessment that will be paid by homeowners with larger lots that potentially produce more storm runoff.

Furthermore, relationships between residential and other types of development also vary among the agencies. In Santa Barbara County, commercial development is charged double the residential assessment, up to an acre, while an acre of commercial development pays 6.66 times what a single family home pays. In Ventura County, the benefit assessment for an acre of commercial property is slightly more than double that for an acre of homes, while in Riverside County the commercial rate per acre is 11 times the residential rate. In the Santa Clara Valley Water district the minimum assessment for commercial property is double that for a home, and the per acre rate for commercial property is approximately 8.4 times that for homes. These ratios reflect the relative burdens of flood control costs that will be borne by commercial versus residential properties.

Riverside County reported that its Lake Elsinore benefit assessment was limited to paying off debt service for capital projects planned for that area, while its NPDES assessment was used for operating costs of that program. Similar to the Santa Clara Valley Water District, Los Angeles, Sacramento, Santa Barbara and Ventura County reported no restrictions on use of benefit assessment revenue, although Ventura County reported that its benefit assessment has historically only been used to pay operations and maintenance costs of its flood control system, and Sacramento County reported one of its two assessments is for a specific capital project.

Separate from its benefit assessment program, Ventura County also levees a fee on all new development to pay for new flood control facilities. That fee is currently $572 for a new single family home, and 2,288 per acre for other development. Ventura County has funded flood control capital projects from this fee and annual property tax revenues.

Capital Planning Issues

Four of the eight jurisdictions reported using some sort of recommendation process from an independent body in order to prioritize flood control projects, as does the Santa Clara Valley Water District with its Flood Zone Advisory Committees. The most elaborate process appears to be in Orange County, where projects are evaluated by a special committee comprised of a flood district representative and five city engineers appointed by the Orange County Division of the League of California Cities. This committee evaluates projects on a point system similar to that used by SCVWD, then makes recommendations to the Board of Supervisors for inclusion in the flood district budget.

However, none of the agencies reported conducting any formal cost-benefit process that would allow projects to be selected so that the most cost-effective projects could be built first. SCVWD staff has reported that such an analysis would be highly speculative, because costs estimates made for projects any significant amount of time in advance of actual planning and construction are unreliable.

Furthermore, none of the agencies reported using any capital management and cost control policies beyond what State and federal laws require. While four agencies reported providing monthly progress reports on capital projects, they indicated these reports generally focused on project scheduling, rather than cost issues. One agency reported making quarterly progress reports.

Five of the eight agencies reported preparing a multi-year capital plan, and the other three reported they are drafting such plans for the first time. The Santa Clara Valley Water District has a five-year plan, which was recently updated.

Three agencies were able to estimate the cost of protecting all areas against a 1 percent flood event. Sacramento Area Flood Control Agency estimated the cost at $274.4 million, Riverside County estimated that cost at $500 million to $1 billion, while Orange County estimated it at $1 billion. The Santa Clara Valley Water District estimated this cost at $750 million to $1 billion. San Diego County was able to provide the most specific information on areas at risk, reporting that 1,750 one-to-four family homes and 400 other buildings remain at risk.

Use of Non-Capital Flood Management

Seven of the eight agencies reporting stated they used non-capital flood management methods, typically review of land use issues. However, one of the seven, San Diego County, reported that its Flood control District Advisory Committee is prohibited from reviewing specific development projects. Santa Barbara County reported limiting development in the vicinity of water courses, requiring that development be set back 50 feet from creeks and 200 feet from rivers. San Diego County also includes development setbacks from streams, equal to 15 percent of the floodway width. The Santa Clara Valley Water District reported that it discourages development in flood plains that does not meet Federal Emergency Management Administration standards. SCVWD Ordinance 83-2 prohibits construction of structures, or grading, within 50 feet of the banks of a watercourse.

Appendix I: The Impact of Proposition 218 on Future Benefit Assessment Elections

In November of 1996, voters in the State of California approved Proposition 218 which requires majority voter approval for all local general taxes and two-thirds voter approval for all local special taxes, and majority property owner approval for benefit assessments. When the fieldwork for this audit began, the actual impact of Proposition 218 on benefit assessments was not clear. However, on July 1, 1997, the Governor approved and signed Senate Bill 919, enacting the Proposition 218 Omnibus Implementation Act prescribing specific procedures and parameters for local jurisdictions in complying with Article XIII C and Article XIII D of the California Constitution.

Based on the passage and enactment of Proposition 218, the SCVWD has determined that the District would not be able to hold an election to continue its current benefit assessments, as Proposition 218 is a "constitutional amendment and supersedes all statutory acts, such as AB 549".[1] In fact, the draft document prepared by the District, it states:

> "Proposition 218 limits the method of assessment to only those properties which receive a *special benefit*, as distinguished from general benefits to these and additional properties; further this *special assessment is* limited to the value of the special benefit. Simply put, the District cannot simply renew the existing benefit assessments nor establish similar assessments because the funding mechanisms are now at variance with California law."[2]

The District has identified several alternative funding mechanisms which would not require any challenge to Proposition 218. These mechanisms include developer impact fees, permit fees, use of all available ad valorem property taxes, establishing a special tax and development of a storm water conveyance utility.

Since HMR focused primarily on benefit assessments, alternatives were developed that would require the District to devise a method of assessing special benefits and continue with the types of benefit assessment programs the public has approved in the past. This appendix, along with the District's Comprehensive Flood Management Project Phase I Report on Development of Baseline Programs and Alternative Funding Mechanisms provides information on alternatives to the current SCVWD Benefit Assessment Program.

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[1] This assertion made by the SCVWD is contained in the Executive Summary of the Comprehensive Flood Management Project Phase I Report on Development of Baseline Programs and Alternative Funding Mechanisms Draft January 1998.

[2] Ibid. ES-2.

Future Benefit Assessment Elections

Background

The SCVWD considered holding an election to extend the current Benefit Assessment Program in March 1996. However, due to the perception that extending the existing Benefit Assessment Program would not have been favored by a majority of the voters, the SCVWD chose to postpone the election until additional information, specifically outlining the SCVWD's planned capital programs and costs, was developed and made available for public review. This decision was based, in part, on information provided as part of Agenda Item Number 7 at the October 24, 1995 Board Meeting, and communications with environmental groups and citizens.

Staff was prepared to go forward with a March 1996 election and had prepared all of the materials necessary to go forward with such elections in the Central and North Central Flood Control Zones. However, private consultants, hired by the SCVWD to assess the SCVWD's readiness to hold an election and conduct an opinion poll of District residents, provided information which stated that the SCVWD was not ready to go forward with an election in March of 1996. The consultants identified four areas which the SCVWD needed to address to have a successful election. The areas that needed to be addressed included:

- Why a Benefit Assessment Election raising rates and extending the current sunset was needed, including a revenue needs analysis, the overall benefits of the projects, and the specific benefits to the property owners;
- Demonstration of a more efficient use of resources;
- Having meaningful communications with environmental and interest groups and citizens; and,
- Developing and articulating current capital improvement, operations and maintenance, and financial plans.

At the time the consultants released their report, the only element deemed to have an adequate level of readiness was the revenue needs analysis. Elements of greater concern to the public, meaningful communications, and current capital improvement, operations and maintenance and financial plans were found to have a very limited level of readiness. In order to raise these elements to a greater level of awareness and understanding with the public, education on the SCVWD's flood control projects and activities was needed. While there was some thought by the Flood Control Advisory Committee members that such awareness could be attained in six months, the Flood Control Advisory Committee members determined that two years would be a better time frame in which to accomplish an adequate level of public education regarding flood control activities and projects.

This two-year time frame was consistent with the consultant's recommendation that the Benefit Assessment Elections be held in the Spring of 1998. At that time, the consultants believed that an adequate level of readiness could be attained on all elements with the exception of demonstrating a more efficient use of resources. During the review and analysis of information on the planned election in 1996, interviews with staff and Flood Control Zone Advisory

Committee members, and based on other observations conducted as part of this audit, we have not seen evidence that the SCVWD has sufficiently addressed the issues identified in the consultants findings, nor that the SCVWD will be able to do so in time to hold a Benefit Assessment Election in June, 1998.

Additionally, with the implementation of the restrictions imposed by Proposition 218, additional requirements must be met by the SCVWD in order to legally impose new, or extended benefit assessments. Even if the SCVWD implements fees that are based on the services provided, such fees may also be subject to majority protest proceeding and/or a vote of the electorate of the specific Utility Zone. The requirements of Proposition 218 add more issues which the SCVWD should address prior to holding a Benefit Assessment Election.

Flood Control Capital Project Funding Requirements and Extending Benefit Assessments

Based on the current rate of construction and the number and estimated cost of capital construction projects that must be undertaken to complete the Flood Control Projects contained in the District's draft 1998-99 Capital Improvement Plan (CIP), the SCVWD must generate $191.1million over the next 10 to 15 years. The projects contained in the draft 1998-99 CIP can be completed by the SCVWD based on the following Assumptions:

- The current Benefit Assessment Program will sunset on June 30, 2000;
- Upon the sunset of the current Benefit Assessment Program, Benefit Assessment Rates will be set at 125 percent of the amount required to fund the annual debt service obligations within each zone;
- Maintenance and operations requirements will be set at a level that is appropriate to the facilities that are on-line; and,
- The long-term debt that has already been authorized, which total approximately $66.9 million, will be issued to pay for capital projects within the respective zones.

The following table represents all projects, identified in the draft 1998-99 CIP (see Section I: Inventory of Flood Control Projects, 1981-1996 for a description of each of these projects).

Table Appendix I.1
Flood Control Capital Projects and Funding Requirements by Benefit Assessment Zone

Zone	Project	Projected Cost	Planned Completion Date
North West	Adobe Creek Planning Study	$ 199,000	1998-99
	Adobe Creek – Foothill/West Edith	13,100,000	2006-07
	Matadero IV El Camino/Stanford	67,000	1998-99
	Matadero V Stanford Channel/Barron Creek	135,000	1999-00
	Matadero IV & VII Bol Pk/Foothill	4,520,000	2006-07
	Matadero Creek LOMR & Remediation	11,655,000	2000-01
	Permanente Creek	27,601,000	2005-06
	San Francisquito Gabion Bank	1,444,000	2002-03
	Total for Northwest Zone	**$58,721,000**	
North Central	Calabazas Creek.	$ 2,900,000	2004-05
	Total for North Central Zone	**$2,900,000**	
South	Lower Llagas Creek - Reimbursable	$243,000	1998-99
	Lower Llagas Creek - Non-reimbursable	96,000	1998-99
	Total for South Zone	**$339,000**	
Central	Guadalupe River -U/S Dst.(Planning)	$ 596,000	1998-99
	Guadalupe River - Corps U/S Hw	740,000	1999-00
	Guadalupe River SF Bay to I-880	19,281,000	2001-02
	Guadalupe River-Hwy 880 to Hedding St.	419,000	2002-03
	Guadalupe River Hedding to Coleman	3,286,000	2001-02
	Guadalupe River Coleman to New Julian	7,044,000	2000-01
	Guadalupe River New Julian/Park	3,196,000	2002-03
	Guadalupe River Woz Way to 280	2,934,000	2001-02
	Escrow Deposits- Corps	2,000,000	1997-98
	Total for Central Zone	**$39,496,000**	
East	Berryessa Cr - Calaveras/Old Piedmont	$ 41,087,000	2003-04
	Coyote Creek - Corps	1,992,000	2006-07
	Coyote Creek (Watershed Stdy.)	8,629,000	2003-04
	Low Silver III Mckee/Hwy 680	5,797,000	2001-02
	Low Silver Reach I-II Coyote/McKee	6,981,000	2000-01
	Low Silver Reach 4 680-Babb	5,354,000	2003-04
	Low Silver Ck Non Reimb.	11,686,000	2006-07
	Low Silver Cr Reimb	8,123,000	2003-04
	Total for East Zone	**$89,651,000**	
Total		**$ 191,105,000**	

Source: Draft 1998-99 CIP

In summary, the planned projects identified in the draft 1998-99 CIP for each zone total $191.1 million. In addition funding for many flood protection projects are not identified at this time. District staff estimated in 1995 a partial list of all the unfunded projects to be $326.8 million (See Section I of this report).

Under the Benefit Assessment Program that is currently in place, to complete the projects identified in the draft 1998-99 CIP for each of the Flood Control Zones, $191.1million is required to fund the projects in the Northwest, North Central, Central, East and South Zones. As previously noted, the ability to complete these planned projects is based on the assumptions that the Benefit Assessment Rates will be set at a level of 125 percent of the debt service requirements and the remaining long-term debt, which has already been authorized, totaling $66.9 million will be issued. Annual debt service payments on the existing outstanding obligations have been estimated at $139.7 million over the next 13 years. However, if the SCVWD issues the remaining $66.9 million in authorized debt, debt service obligations, through 2010 would increase by $54.4 million to $191.1 million. Table Appendix.2 shows the affect of issuing an additional $66.9 million in debt on current debt service obligations for each Zone.

Table Appendix.1
Projected Debt Service Requirement
For Flood Control Zones Based on
Existing Debt and the Issuance of $66.9 Million
in New Debt Through 2010

Zone	Debt Service on Existing COPs	Debt Service on all COPs (including new issues)	Difference
Northwest	$20,270,250	$48,022,000	$27,751,750
North Central	$24,951,550	$22,295,000	($2,656,550)
Central	$55,568,695	$65,793,000	$10,224,305
East	$30,991,194	$50,043,000	$19,051,806
South	$7,949,500	$7,945,000	($4,500)
Total	**$139,731,189**	**$194,098,000**	**$54,366,811**

Note: Data is based on debt service requirements as of July 1, 1997 for the existing debt and the changes in debt service based on the proposed sale of approximately $66.9 million in new debt in the Northwest, Central and East Zones prior to the sunset of the Benefit Assessment program on June 30, 2000. The sale of the additional $66.9 million in debt has been authorized by the voters of the respective Flood Control Zones.

The SCVWD still has approximately $1.0 million in additional debt capacity, and the option to ask the voters to authorize additional bond financing to fund Flood Control projects within the North Central Zone. As stipulated in the Benefit Assessment Program approved in the June 1990 election, the SCVWD has until June 30, 2000 to obtain authorization from the voters to utilize the additional debt capacity in order to finance and complete projects within the North Central Zone. As of the writing of this report, the SCVWD has not formalized plans to request such authorization from the voters in the North Central Zone.

In order to complete and fund all of the projects identified in the 1986-2000 Flood Control Plan, support current maintenance levels, and fund current operating costs, the SCVWD must either extend the existing Benefit Assessment Program, devise a new Benefit Assessment Program, or develop new sources of revenue. Alternatively, spending on capital projects, maintenance and operations will need to be reduced. Extending the existing program, or devising a new Benefit Assessment Program, requires compliance with the parameters of Proposition 218. As such, the

SCVWD must decide whether there will be a benefit assessment levied against property owners for special flood control benefits, or whether there will be a fee or charge levied against property owners for flood control services provided by the District. Depending on the choice made by SCVWD, there must be a majority protest proceeding for affected property owners (those to be assessed for the special flood control benefits), or an election to obtain the approval of a super-majority of the voters in each of the Flood Control Zones, where a flood control tax, fee or charge is to be levied. However, any new fee or charge levied against a property that is based on value, or assessed against an individual by reason of ownership of such property, may also be subject to a majority protest process and an election that would require a two-thirds approval by all qualified voters.

Impact of Proposition 218

Proposition 218 requires majority voter approval for all local general taxes and two-thirds voter approval for all local special taxes, and majority property owner approval of benefit assessments and fees. For benefit assessments and fees, a majority protest proceeding, that includes all affected property owners, must be held. As passed, Proposition 218 applies to all local governments and special districts, including the SCVWD.

Legal Counsel for the SCVWD states that Proposition 218, voted into law in November 1996, applies to any extension or change in the existing Benefit Assessment Program and Benefit Assessments levied by the SCVWD. As such, any extension of the existing Benefit Assessment Program beyond the June 30, 2000 sunset, or any new Benefit Assessment Program, or other method of levying fees, or charges, against property, must meet the conditions specified in Articles XIII C and XIII D of the State Constitution.

According to the text of these Articles, in order to levy special assessments, the SCVWD must separate the special benefits from the general benefits derived from the projects, for each Zone, and only the special benefits may be assessed. The text of these Articles further states that such assessments must be supported by detailed engineering reports prepared by registered professional engineers certified in the State of California. Such report will define the special benefits to be derived from the project or service and, calculate the assessment rates and appropriately spread the assessment among the affected properties based on the existing landuse categories.

To comply with Proposition 218 if the SCVWD wishes to increase or extend the existing Benefit Assessment Program, the SCVWD must provide notice of the proposed increase or extension to the record property owner of each parcel of real property affected by the proposed changes in assessment. The notice, mailed to each property owner in the affected Flood Control Zones, must contain the calculation of the benefit assessment charges and must also include:

- A ballot form to be used in conducting the majority protest vote that is part of the upcoming public hearing on the change in assessment;
- The total assessment charged to the entire Special Assessment Zone;
- The amount chargeable to the owner's specific parcel;

- The duration of the payments (length of time the special assessment would be in effect);

- The reason the special assessment has been proposed; and,

- The basis upon which the amount of the special assessment was calculated.

As previously noted, all of the above must be supported by a detailed engineer's report.

The SCVWD must hold a public hearing to conduct a majority protest proceeding and obtain the majority of the land-owners approval for such changes to occur. This public hearing must be held no less than 45 day after the mailing of the notification to property owners. As part of the public hearing a majority protest vote must be held using the ballots that were included in the notification to property owners. However, the ballots are to be weighted based on the proportionate share of the total assessment to be levied against each affected property owner. For example, if there are three parcels that comprise a 100 acre zone, and Parcel A is assessed 10 percent of the total assessment, Parcel B is assessed 30 percent of the total assessment, and Parcel C is assessed 60 percent of the total assessment, the owner of Parcel C must agree with the assessment (not protest) in order for the assessment to be imposed. Without the approval of the owner of Parcel C, there is no way to obtain the required majority, proportionately.

The notification mailed to each record property owner indicating the time and date of a public hearing to discuss the proposed special assessment, and contain a ballot, used to determine if a majority protest exists, is the minimum required under the law.

Alternative Sources of Revenue

New sources of revenue should be sought in order to replace the revenues that will be lost once the current Benefit Assessment Program sunsets. Identifying on-going sources of revenue would be most beneficial to the SCVWD. For example, the SCVWD states that it is considering other alternatives to Benefit Assessments such as redistributing property tax monies or charging Ordinance Administration fees. In addition to considering such alternatives the SCVWD should continue its practice of pursuing project specific revenues from other governmental agencies in order to reduce the SCVWD's costs.

Taking the total revenue generated by Benefit Assessments, since the inception of the Program in 1981, the average annual revenue generated from Benefit Assessments is $20.1 million. As previously noted, the SCVWD must replace approximately $7.2 million in revenue on an annual basis ($20.1 million in total Benefit Assessment Revenue, annually, less $12.9 million for authorized annual debt service coverage). Table Appendix.3 provides a five-year history of revenues generated from Benefit Assessments, by zone.

Table Appendix.3
Net Revenue Collected from
Benefit Assessments for Fiscal Years
1991-92 through 1995-96

Zone	1991-92	1992-93	1993-94	1994-95	1995-96	Total Net Revenue
North West	$4,444,055	$4,688,054	$5,176,207	$4,950,168	$4,949,630	**$24,208,114**
North Central	$2,265,585	$2,391,422	$2,613,598	$2,546,822	$2,584,516	**$12,401,943**
Central	$5,639,720	$6,009,525	$6,778,224	$6,372,803	$6,473,525	**$31,273,797**
East	$4,431,299	$4,791,648	$5,499,959	$5,139,247	$5,241,640	**$25,103,793**
South	$1,400,545	$1,617,444	$1,885,005	$1,824,477	$1,865,812	**$8,593,283**
Total	**$18,181,204**	**$19,498,093**	**$21,952,993**	**$20,833,517**	**$21,115,123**	**$101,580,930**

Source: Flood Control Benefit Assessments For Fiscal Year 1997-98; Santa Clara Valley Water SCVWD, Table I 'Benefit Assessment Revenue 1988-89 Through 1996-97', page 10

Based on language contained in Article XIII D of the Constitution as amended by Proposition 218, any fee or charge that is property based, and is charged to the property owner could be subject to limitations. Fees and charges have been defined as:

> ***'...any levy other than an ad valorem tax, or an assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership, including a fee or charge for a property related service.'***

Section 6, subsection 4 of Article XIII D further states that:

> ***"No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted. Standby charges, whether characterized as charges or assessments, shall be classified as assessments and shall not be imposed without compliance with Section 4."***

As such, any fees, charges or other levies based on factors such as proportional runoff, property value, property size or the benefit derived from a specific service, require a vote of all property owners and/or the entire electorate. In some instances, such fees and charges may also be subject to the majority protest process, detailed in Section 4 of Article XIII D of the California Constitution. However, implementing fees for services related to the administration of District Ordinance 83-2, or contracting with local jurisdictions to provide flood management services would not be subject to restrictions imposed by Proposition 218. These options are discussed in greater detail in Section III: Ordinance Administration Fees 83-2.

Options Available for Handling Proposition 218 Restrictions and Revenue Generation

The SCVWD has several options with respect to addressing the impending sunset of the current Benefit Assessment Program and generating revenue to fund the SCVWD's capital and maintenance and operations activities. With the exception of maintaining the current program, as is, or totally eliminating the Benefit Assessment Program and any fees levied against properties and property owners, any action taken to extend the program, or implement a new program or charge, will require compliance with Proposition 218. A discussion of each option follows.

> ***Option A:*** *Allow the Benefit Assessment Program to sunset in 2000 as proposed. Remaining Benefit Assessment Revenues collected would be equal to 125 percent of the annual debt service obligation for each Flood Control Zone.*

This option maintains the current course for the existing Benefit Assessment Program. As such, on June 30, 2000 the SCVWD's Program would sunset and the only revenues that can be levied against property owners and collected within the Flood Control Zones is an amount that is equal to 125 percent of the annual debt service requirements for each zone. With this option there is a loss of approximately $7.2 million on an annual basis. The loss of this revenue effectively eliminates any capital projects beyond the $191.1million identified in the draft 1998-99 CIP.

However, the current Benefit Assessment Program with all of its limitations on funding, and the scheduled sunset was approved by the voters in each of the Flood Control Zones. By allowing the Program to sunset as planned, the SCVWD is meeting the expectations of the voters. Additionally, the Program and sunset was designed to provide the SCVWD with enough revenue from Benefit Assessments to meet the annual debt service requirement of approximately $10.3 million, annually, for all zones and an additional $2.6 million that is available for other uses such as operation and maintenance, or additional capital projects.

> ***Option B:*** *Extend the Benefit Assessment Program in its current form by maintaining the current restrictions on use and rate increases, but postponing the sunset of the Program until June 30, 2010 to coincide with alternative scenarios presented in the 2010 Flood Control Plan.*

This option would allow the SCVWD to expand its capital program to include projects that are currently in addition to the $191.1million that could be funded if the Benefit Assessment Program sunsets as planned. Maintaining current Benefit Assessment rates, the SCVWD would generate approximately $72.0 million in revenue from July 1, 2000 through June 30, 2010. This $72.0 million estimate is based on the current average annual revenues form Benefit Assessments. Additionally, this is a Program and concept with which the voters are familiar. Maintaining the restrictions also provides the voters some assurance that there is a finite amount of additional time associated with the special assessments that are levied to fund capital and other costs.

The SCVWD would be required to conduct a majority protest process in each of the five Flood Control Zones and meet the restrictions imposed by Proposition 218. As such, the SCVWD would still be required to address the issues of defining special benefits, calculating the amount of the assessments for each parcel, and defining the capital projects to be included as part of the special assessments. To ensure passage of the majority protest, the SCVWD should also address the public education issues and concerns mounted by environmental and citizen's groups.

> ***Option C**: Hold a Benefit Assessment Election to extend the sunset on the existing Benefit Assessment Program and change the scope on allowable revenue collection upon the new sunset.*

This option allows the SCVWD to change the parameters of the program and reconfigure or eliminate zones to gain better economies of scale with regard to capital projects. For example, the additional revenue that would be generated as a result of the continued collection of Benefit Assessments could be used to expand the capital projects beyond the $191.1million that have been identified for the five Flood Control Zones.

Since this would be considered a new Benefit Assessment Program, the SCVWD would be required to meet the restrictions imposed by Proposition 218. Again the SCVWD would be required to address the issues of defining special benefits, calculating the amount of the assessments for each parcel, and defining the capital projects to be included as part of the special assessments. To ensure passage of the majority protest, the SCVWD should also address the public education issues and concerns mounted by environmental and citizen's groups.

> ***Option D**: Create a new Benefit Assessment Program on a District-wide basis with broad parameters regarding revenue generation and use, and no sunset on the assessment of fees.*

This option would allow the SCVWD much greater latitude with regard to revenue generation and project planning. Under a new Benefit Assessment Program that operated on a District-wide basis, the existing Flood Control Zones would be eliminated. There would be one Flood Control Special Revenue Fund and no segregation of the revenues collected by Zone. As such, all projects could be funded with any revenues generated from the Program. Additionally, without a sunset, the SCVWD would have a continuous source of revenue which could be used to fund capital, maintenance and operating activities.

Implementing a District-wide Benefit Assessment Program may be very difficult due to the restrictions that must be met to comply with Proposition 218. The language of the new law clearly states that the special benefit must be defined and separated from the general benefits derived from a project or program.

> ***Option E**: Contract with the 15 local jurisdictions and the County that comprise the service area for the SCVWD, to provide flood control services.*

This option would allow the SCVWD to negotiate contracts with: the fifteen cities, Campbell, Cupertino, Gilroy, Los Gatos, Los Altos, Los Altos Hills, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San Jose, Santa Clara, and Saratoga, Sunnyvale and Santa Clara County, to cover unincorporated areas of the County. The contracts would set the terms under which the SCVWD would provide flood control services including the cost and duration of such services. Providing flood control services on a contractual basis would not be subject to the provisions of Proposition 218. As such, the SCVWD would not have to support the contracts with detailed engineering studies nor deal with any of the restrictions on use of funds based on the differentiation of special from general benefits.

However, the jurisdictions may not have the resources available to fund flood control service contracts. Even if the resources were available, these jurisdictions would probably try to pass some of the cost of the flood control services through to residents. Such a pass-through may be subject to the provision of Proposition 218. Additionally, flood control service contracts negotiated between the SCVWD and the jurisdictions would contain 'subject to appropriation' clauses. The legislative/governing body for each jurisdiction would have to appropriate such funds annually. If for any reason such appropriations were not made, the SCVWD would have to decide if the residents in the area would receive flood control services and how those services would be funded.

> ***Option F:*** *Request an opinion from the Attorney General on whether assessments for flood control services are exempt from the conditions imposed by Proposition 218, and if not, what would a flood control entity need to do in order to meet the conditions set by the new law.*

This option would require the SCVWD to formally request an Attorney General's Opinion on the affect of Proposition 218 on Flood Control entities and their ability to charge benefit assessments to property owners within their jurisdiction. Obtaining such an opinion would provide a definitive basis for all of the actions flood control entities are required to perform with regard to holding benefit assessment elections, majority protest proceedings and elections, public hearings and, project and special benefit definition.

However, the SCVWD and other flood control entities must be prepared to accept the opinion once it has been issued. Such an opinion has been issued with regard to water rates. The Attorney General has determined that water districts may impose a tiered water rate structure that assesses a higher charge per unit of water as the level of consumption increases without violating the constitutional limitations placed upon fees for service. This determination reached, in part, due to the imposition of water charges irrespective of property ownership. The charges are placed on a water bill which is sent to the user, even if the user is not the owner of the property. This is not likely to be the case with the benefit assessments for flood control, as they are included in the annual property tax bill, sent only to the owners of property.

> ***Option G:*** *Implement fees charged to parties seeking services associated with compliance with and administration of District Ordinance 83-2.*

This option would implement a new cost recovery program for the SCVWD. At this time there are no fees charged for the services provided under District Ordinance 83-2. This ordinance regulates the permit process for developers and land owners who are engaging in construction/maintenance projects that are adjacent to SCVWD facilities, as well as streams, reservoirs, rivers, etc. (see Section III: Ordinance Administration Fees 83-2). A cost recovery program is clearly a fee-for-service situation and, as such, would not subject to the provisions of Proposition 218.

However, this revenue source is extremely sensitive to changes in the economic conditions that drive new development. Reasonable fees schedules would allow the SCVWD to recover between 60 to 65 percent of the cost of providing these services. Such costs have been estimated at approximately $2.2 million for Fiscal Year 1997-98. Even at full cost recovery, which is not a reasonable assumption, the amount of revenue generated is $5 million less than the $7.2 million that will be lost, annually, when the Benefit Assessment Program sunsets on June 30, 2000.

Table Appendix I.4, which begins on the next page, also provides a brief description of options available, along with the pros and cons of each option, and a ranking. These options were ranked based on: 1) the flexibility the option provides with regard to current and future funding for capital projects, maintenance and operations and the generation of revenue; 2) the level of funding the option provides for capital projects, maintenance and operations; 3) the ease with which the District could inform property owners and qualified voters of the plans to extend or revise the Benefit Assessment Program; and 4) the likelihood of meeting the restrictions imposed on property ownership based fees and charges by the approval of Proposition 218.

Table Appendix I.4
Options for Addressing the Impending Sunset of the SCVWD's Existing Benefit Assessment Program

OPTION	PROS	CONS	Ranking
A **Allow Benefit Assessment Program to Sunset As Proposed with Revenues Collected Equal to 125% of the Annual Debt Service Obligation for Each Flood Control Zone.**	• Benefit Assessment Program has been accepted by the voters. • Revenue generated allows the District to fund debt service on projects that have already been constructed or are near construction. • Generates approximately $2.6 million in additional revenue that can be used for other purposes such as maintenance, operations, and small capital projects.	• After the sunset of the program, it will become difficult to fund maintenance and operations activities in two zones (Northwest and South). • Revenue available to fund capital construction projects will be reduced by $7.2 million, annually, after the Program sunsets on June 30, 2000. • A significant portion of the $191.1million in flood control projects, identified in the draft 1998-99 CIP cannot be completed.	**7** This is an option to do nothing and it will effectively eliminate future capital projects by reducing annual revenue by $7.2 million.
B **Extend the existing Benefit Assessment Program in its current form by maintaining the current restrictions on use and rate increases, but postponing the sunset of the Program until June 30, 2010.**	• Benefit Assessment Program has been approved by the Voters. This would effectively extend the sunset by ten years. • Additional revenue generated from the extension of the Benefit Assessment Program can be used to expand the capital program beyond the $191.1 million in projects identified in each of the Flood Control Zones. • Generates a minimum of $2.6 million in additional revenue, annually, that can be used for other purposes such as maintenance, operations, and small capital projects.	• Extending the sunset on the existing Benefit Assessment Program requires compliance with the provisions of Proposition 218. • To date, no flood control agencies have mounted a challenge to 218 or held elections that test the parameters of the legislation. As such the SCVWD would become the test case. • Issues with regard to project definition, public education, and concerns expressed by environmental and citizen's groups which prompted the SCVWD to postpone the March 1996 election must still be addressed.	**5** This option extends the sunset but does not lift any of the restrictions on use of funds or the amount of revenue that can be generated once the Program sunsets. However, this option does solve an immediate problem regarding funding capital improvements.

Table Appendix I.4
Continued

OPTION	PROS	CONS	RANKING
C **Hold a Benefit Assessment Election to extend the sunset on the existing Benefit Assessment Program and change the scope on allowable revenue collection upon the new sunset.**	• Allows the SCVWD to change the parameters of the program and reconfigure or eliminate zones to gain better economies with regard to capital projects. • Additional revenue generated from Benefit Assessments can be used to expand the capital program beyond the $191.1million in projects identified in for each of the Flood Control Zones. • The voters have previously approved benefit assessments and the concept of benefit assessments is not new.	• Extending the sunset on the existing Benefit Assessment Program requires compliance with the provisions of Proposition 218. • To date, no flood control agencies have held elections within the parameters of Proposition 218 or tested the parameters of the legislation. As such the SCVWD would become the test case. • Issues with regard to project definition, public education, and concerns mounted by environmental and citizen's groups which prompted the SCVWD to postpone the March 1996 election must still be addressed.	**1** Even though this option requires a challenge to Proposition 218 it will allow the SCVWD to craft a Benefit Assessment Program that is less restrictive and allows continued construction of capital improvements.
D **Create a new Benefit Assessment Program on a District-Wide basis with broad parameters regarding revenue generation and use and no sunset on the assessments.**	• Provide a continuous source of revenue for capital and maintenance projects and operating activities. • Revenues generated would not be restricted to specific zones providing greater flexibility with regard to initiating and completing capital projects (ongoing projects and emergency repairs from flood damage). • Benefit Assessment elections could be held on a district-wide basis as opposed to developing ballot issues for individual Benefit Assessment Zones.	• Proponents of Proposition 218 would more likely than not mount a serious challenge to a proposed "benefit assessment" that did not have clearly defined geographic boundaries that were specifically related to the proposed projects creating such benefits. • Without clearly defined zones and clearly defined projects within such zones, the process of educating the public and environmental groups is much more difficult and time consuming. • It is doubtful that the SCVWD would be able to separate the special benefits from the general benefits of projects, as required by 218, or meet the requirement that all assessments be supported by a detailed engineering study prepared by a registered professional engineer certified by the State.	**2** This is a more serious challenge to Proposition 218 but if successful, the SCVWD has much greater latitude in packaging capital projects and expending benefit assessment revenues to fund such projects.

Table Appendix I.4
Continued

OPTION	PROS	CONS	RANKING
E **Contract with the 15 local jurisdictions and the County that comprise the service area for the SCVWD, to provide flood control services.**	• SCVWD gets to negotiate the terms of the contracts with each of the jurisdictions based on the cost of providing services including the cost of capital construction projects. • Since this could not be defined as a fee based on the value of property or property ownership, these contracts would not be subject to the provisions of Proposition 218. • Revenues from the services provided are tied to the terms of the contracts and as long as the contracts are in force, revenues would be generated. • Cities could issue debt (e.g. Certificates of Participation) to fund local projects.	• The jurisdictions within the SCVWD's service area face the same fiscal pressures of any other jurisdiction and may not have the resources to pay such contracts out of the General Fund. • If the jurisdictions try to pass the cost of such contracts through to the residents, the actions of the jurisdiction may be subject to the provisions of Proposition 218. • All of the jurisdictions would more likely than not insist upon a 'subject to appropriations' clause. If for any reason a future legislative body failed or refused to appropriate funds to honor these contracts, the SCVWD would have to determine if and how to provide services to those jurisdictions.	**4** It is not likely that the SCVWD will be able to negotiate with all of the jurisdictions or that the jurisdictions will not try to pass the cost through to residents. The challenge to 218 will be taken on and the jurisdictions will be aware of the implications of these arrangements.
F **Request an opinion from the Attorney General on whether assessments for flood control services are exempt from the conditions imposed by Proposition 218, and if not, what would a flood control entity need to do in order to meet the conditions set by the new law.**	• SCVWD and all other flood control entities would have a definite reading of their position under the new law. • All flood control entities would be operating under the same conditions so one will not have any advantages over the other in implementing new or extended benefit assessment programs. • An opinion could be issued prior to the sunset of the existing program and allow the SCVWD ample time to meet whatever the requirements are determined to be. • A water district has already asked for and received an Attorney General's Opinion on tiered water rates.	• Once the opinion is issued, SCVWD has no room to maneuver as all of the gray area in the law will have been defined with regard to the issues addressed in the Attorney General's Opinion. • To date, no water district has asked for an opinion on the impact of Proposition 218 with regard to flood control activities. • The opinion rendered on tiered water rates was based on very different issues. The matters in question were fees for service as opposed to an assessment for a benefit, and the charges are passed to users, regardless of ownership as opposed to an assessment which is based on and passed only to property owners on a tax bill.	**6** The outcome of such a request will more likely than not reinforce the current notion that flood control assessments are not exempt. Therefore, it may be a better use of time and effort to determine how to best comply with the new law.

Table Appendix I.4
Continued

OPTION	PROS	CONS	RANKING
G **Implement fees, charged to parties seeking services associated with compliance with and administration of Ordinance 83-2.**	• There will always be parties who need to use these services, thereby generating some amount of revenue for the SCVWD. • This is clearly a fee for services provided and as such it would not be subject to the provision of Proposition 218. • The SCVWD would begin to recover a portion of the costs associated with providing such services.	• The most the SCVWD would be allowed to recover would be the actual cost of providing Ordinance Administration services which for FY 1997-98 is approximately $2.2 million. • Reasonable fee schedules would only allow the SCVWD to recover 60 to 65 percent of the cost of providing these services. • Such fees are tied to land development and requests for permits. As such revenue generation is sensitive to changes in development activities. • The potential revenue generated at full cost recovery, which is not a reasonable assumption, is $5 million less than the revenue lost as a result of the sunset on Benefit Assessment Fees.	3 The SCVWD is allowed to recover the cost of conducting these activities. Any revenue generated reduces the SCVWD's net cost and makes Funds available for other activities. Enough revenue may be generated to offset some of the continuing maintenance costs if Benefit Assessments sunset and are not extended.

The SCVWD made a decision to postpone a Benefit Assessment Election that was planned for March 1996. Since that time, the California electorate passed Proposition 218, also known as the Right to Vote on Taxes Act, which imposes restrictions on a jurisdiction or special district that uses benefit assessments to fund programs and activities. To extend or change the parameters of the existing Benefit Assessment Program, the SCVWD must meet all of the conditions set by Proposition 218 with regard to identifying the special benefits to be received by land owners, calculating the amount of the benefit and the assessment, notifying affected property owners, and conducting a majority protest proceeding that meets the requirements of the new law.

To date, no flood control agency has tested the parameters of Proposition 218, and while there has been an opinion by the Attorney General with regard to exempting water rates, there have been no such decisions on exempting flood control assessments, fees, or charges. It is not known whether any such opinion will be rendered prior to the Spring 1998 election date identified by the SCVWD and the consultant hired to assess the SCVWD's readiness to hold a Benefit Assessment Election. If the SCVWD wishes to go forward and extend the existing Benefit Assessment Program, then the SCVWD may be the first flood control entity to test the parameters of Proposition 218 by devising a majority protest/election process that does not initiate challenges from proponents of the new law and meets the requirements and intent of the legislation.

APPENDIX II

TABLE OF SANTA CLARA VALLEY WATER DISTRICT SURVEY RESPONSE AND A SUMMARY OF ALL RESPONDING DISTRICTS

	Agency	SANTA CLARA VALLEY WATER DISTRICT	SUMMARY OF DISTRICTS, NOT INCLUDING SCVWD
1.	***Square miles of district***	Entire County of Santa Clara, approximately 1,300 square miles	Range, 303-23,000 miles. Average, 6900
2.	***Square miles drainage***	1,300 square miles; no areas outside the County	Four agencies answered. Range, 2,100-20,000. Average, 6,831
3a.	***Miles of channels improved/unimproved***	200 miles improved, 450 miles unimproved.	Range improved, 59.8-446 miles. Average, 227 miles. Range Unimproved (Four agencies answering), 4-741 miles. Average, 230 miles
3b.	***Miles improved since 1980***	More than 50 miles improved, or 25 percent of total improved miles, protecting 20,000 homes, at a cost of $140 million	Percentage improved added since 1980 (Six agencies responding) Range, 1.67 percent to 51 percent. Average, 17.79 percent
3c.	***Dams operated***	10, for water conservation, with limited flood protection.	0 to 32. Average, 18
4.	***Mission or goals***	The District's two key missions are: 1) to provide high-quality water at the wholesale level in sufficient quantity for present and future beneficial use by the County's lands and population, and 2) to manage flood and storm waters within the County, thereby providing for public safety and the protection of property and natural resources.	Flood protection, 8, 100 percent. Conserve flood waters and/or water supply, 4, 50 percent. Environmental protection, 1, 12.5 percent.
5.	***Agency environmental policy or guidance?***	No. The District's formal direction for new capital projects is to comply with environmental regulations, and not provide environmental enhancements. With regard to maintenance work, the guideline is also to comply with environmental regulations.	Five of eight agencies, 62.5 percent reported some environmental policy beyond State & federal requirements for individual projects. San Diego appears to go the furthest, with a County resource protection ordinance.

	Agency	SANTA CLARA VALLEY WATER DISTRICT	SUMMARY OF RESULTS, NOT INCLUDING SCVWD
6.	***Maintenance level policy***	Improved channels will be maintained to provide the level of protection for which they were constructed. Natural channels will be maintained to the extent that funding is available and the District has some degree of legal title.	2 of 7, 28.6 percent, routinely clean all channels yearly or more frequently. Others clean as needed. 2 of 8, 25 percent, noted that State and federal regulations are constraining maintenance.
7.	***Use of herbicides or mechanized equipment***	Yes. Accessibility to the work area and purposes of the work generally dictate the method that will be used. For example, discing an overflow channel would control vegetation, but that soil disturbance could contribute to erosion and sedimentation. In the South Zone, current policy prevents the use of herbicides. Work is limited to mechanized or manual methods.	All 7 reporting use both mechanized equipment and herbicides. 3 of 7, 42.9 percent, said use of these tools is limited by regulatory requirements.
8.	***Maintenance of privately-owned creeks***	It is the property owner's responsibility to maintain creeks through privately owned property. The District cannot provide maintenance unless it has land rights.	1 of 7, 14.3 percent, maintains private creeks. Santa Barbara County does so, "if access and permission are provided, and if there is a compelling regional benefit."
9.	***Acquire fee title or permanent easements to all private ROW***	No. Our goal is to acquire land rights in areas where flood protection is needed. We used to be more aggressive in acquiring land rights along creeks without our jurisdiction, but have cut back on this activity, primarily due to financial constraints.	3 of 8, 37.5 percent, say they do seek to acquire private right of way on streams. San Bernardino will do so "in creeks considered to be 'regional' facilities, carrying 750 cfs or draining 500 acres or more," Sacramento does so "within areas protected or impacted by projects," and Ventura County will do so, "only if (private right-of-way) is improved to District standards."

	Agency	SANTA CLARA VALLEY WATER DISTRICT	SUMMARY OF RESULTS, NOT INCLUDING SCVWD
10.	***Stream restoration, habitat enhancement***	No. The District policy regarding stream restoration/habitat enhancement has been to provide these items as mitigation when required for capital improvements and in some instances maintenance. The District Board has an interest in such a policy. The District is engaged in an integrated Fisheries and Aquatic Habitat Management Program that may influence a possible future environmental/habitat policy.	3 of 8 agencies, 37.5 percent, have plans for stream restoration or habitat enhancement in addition to what State and Federal laws and regulations require.
11.	***Maintenance scheduling***	Operations & Maintenance has developed a computerized system to assist in effectively managing its maintenance work. Productivity is evaluated by comparing work accomplishments to performance measurement standards.	4 of 7, 57.1 percent report using a software package to schedule maintenance annually. 5 of 7, 71.4 percent, report they evaluate maintenance productivity against established maintenance standards.
12.	***Benefit Assessment***	Yes.	5 of 8, 62.5 percent, report levying benefit assessments
13.	***Last voter authorized***	1986 for 4 of 5 zones. 1990 for the other.	3 of 5, 60 percent had voter authorization for some or all of the assessment program.
14.	***Expiration date***	The current program expires June 30, 2000 in all zones. At that time, assessments will be limited to 125 percent of outstanding long term debt service until repayment in 2024.	Elsinore Valley in Riverside County and North Area Project in Sacramento County are assessments for specific capital projects with defined expiration dates. Operations and maintenance or NPDES assessments in five agencies have no expiration date, and thus appear exempt from Prop. 218.

	Agency	SANTA CLARA VALLEY WATER DISTRICT	SUMMARY OF RESULTS, NOT INCLUDING SCVWD
15.	***Voter reauthorization***	It is very likely that some funding source will be pursued.	None scheduled. All agencies with NPDES or O & M assessments permit annual approval at current rates by agency directors. San Bernardino County formerly had an assessment program, which was canceled by the Board of Supervisors.
16a.	***Benefit Assessment rate***	Residential rates vary, from $16.44 in the North Central Zone, to $55.14 in the South and Northwest zones. Commercial/Industrial rates per acre also vary, from a minimum charge of $32.88 and a per-acre charge of $131.55 in North Central, to a minimum of $110.26, with a per-acre charge of $441.09, in the Northwest Zone.	Assessment varies widely, from a low of $1.97 for a single family home in Santa Barbara County, to $36.66 in Ventura County. Comm/Ind. varies from a low of $13.16/acre in Santa Barbara County to $288/acre in San Bernardino.
	BAU bases	The basic BAU is a single family home on 10,890 square feet. Minimum commercial/industrial rates are double those for residential, and apartments, schools & churches are 33 percent higher than residential.	4 of 5 counties, 80 percent use basic assessment unit concept with single family dwelling as the base BAU in calculating assessments based on proportionate runoff. Sacramento Area Flood Control Agency uses a different method. Basic lot size ranges from 7,200 square feet in Riverside County to 14,187 square feet in Los Angeles County. Ratio of Commercial/Industrial assessments versus residential assessments ratio also varies, from 6.66 BAU in Santa Barbara County to 12 BAU in Riverside County.
16b.	***Benefit Assessment revenue***	1996-97 revenue for all zones is $22,691,562.	$1,957,000 in Santa Barbara County, to $107 million in Los Angeles County.

	Agency	SANTA CLARA VALLEY WATER DISTRICT	SUMMARY OF RESULTS, NOT INCLUDING SCVWD
17.	***Average SFD combined property tax & assessment***	Based on a home with an assessed value of $200,000, combined property tax/benefit assessment costs range from $38 in the North Central Zone, to $86 in the South Zone.	Provided by Santa Barbara County, which reported average rate of $7.94 per $100,000 assessed value, and Los Angeles County, which reported a maximum cost of $46.04, based on a 100,000 home value in 1979, inflated 2 percent annually, with benefit assessment of $28.85 for a 6,647 square foot lot.
18.	***BA adjustment method***	Assessment limits in the voter approved benefit assessment measures are limited to the annual increase in the San Francisco Bay Area Consumer Price Index or 2 percent per year, whichever is greater.	By CPI, 1 of 5 agencies, 20 percent. Adjusted by directors by need, 2 agencies, 40 percent. Rates frozen due to Prop. 218, 2 agencies, 40 percent.
19.	***Benefit Assessment uses***	Monies must be used for flood management purposes, including capital improvements, operations and maintenance.	Riverside and Sacramento have assessments for specific capital projects. Riverside has NPDES assessment. O & M assessments in Los Angeles, Sacramento, Santa Barbara and Ventura are not limited, although Ventura has historically used BA only for non-capital spending, although there are no restrictions.
20.	***Maintenance budgeting***	Routine and preventative work, such as trash and debris removal, vegetation management, revegetation maintenance, fence repairs, etc., are budgeted to provide historic levels of service. Special projects such as sediment removal and erosion repairs are budgeted to the extent that funding is available and to the extent that there is reasonable certainty to obtain regulatory permits in time to do the work. Program costs for different levels of service are being developed.	3 of 7 agencies, 42.9 percent, use a computer-based system to schedule maintenance work. 1 of 7 agencies, 14.3 percent, reported conducting advance planning for maintenance costs of new facilities.

	Agency	**SANTA CLARA VALLEY WATER DISTRICT**	**SUMMARY OF RESULTS, NOT INCLUDING SCVWD**
21.	***Multi-year capital plan***	Yes. Five-year plan	5 of 8 agencies, 62. 5 percent, have a formal multi-year capital plan. The other three agencies reported they are in the process of drafting such a plan.
22.	***Cost-benefit on local projects***	No.	None of the agencies conduct any formalized process resulting in a numerical cost-benefit calculation to determine whether or not to build a locally-funded project, or how to prioritize such projects.
23.	***Early 1990s revenue loss & how addressed***	Yes. Funds for capital improvements were reduced.	5 of 8 agencies, 62.5 percent reported revenue reductions ranging from $600,000 to $8.5 million. 3 of the 5 agencies, 60 percent, reported reductions were addressed by staff reductions, either through layoffs or attrition. 2 of 5 agencies, 40 percent, reported delays in capital programs. 1 of 5, 20 percent, reported recovering lost tax monies through State legislation.

24.	***Permit fees for developers***	No	6 of 8 agencies, 75 percent charge some sort of fee for development near or adjacent to District facilities, usually a grading and/or plan check fee. Basic filing fees for these projects were generally $500 to $600, with other fees required depending on the nature of the project. In addition, Ventura County levees an acreage assessment fee on all new development to pay for new flood control facilities. This charge is a minimum $572 for a single family home, and is $2,288/acre. Sacramento Area Flood Control has a Capital Investment Equalization Fee charged to new development in areas with existing projects to equalize payments between existing and new development based on benefits received.
25.	***Permit fees planned***	Staff is looking at charging fees, and has done so in the past. The flood advisory committees are recommending greater reliance on fees. No estimates of revenue have been made yet.	
26.	***Permit violation sanctions***	If a developer/owner does not obtain a permit, he is in violation of District Ordinance 83-2, and is subject to fines and/or court action. Whether the District takes action depends on the impact to the District facility from the unpermitted activity, and whether a remedy is available (and taken) short of court action or fine.	2 of 8 agencies, 25 percent, indicated having a formal process to respond to illegal construction adjacent to their facilities. A third agency said they attempt to resolve encroachments informally on a case-by-case basis.

	Agency	SANTA CLARA VALLEY WATER DISTRICT	SUMMARY OF RESULTS, NOT INCLUDING SCVWD
27.	***Design protection standard***	No. The District has built facilities at less than the 1 percent protection level, but that is not current practice.	2 of 8 agencies, 25 percent said some facilities may be built at less than a 100-year standard. 1 agency reported its goal is 200-year protection, a more conservative standard.
28.	***District percentage 1 % risk***	Approximately 350 miles, or 55 percent of the District's flood control channels.	Range (three agencies reporting), 5-67.5 percent of District area at risk from 1 percent flood. Average percentage of District area at risk, 43.4 percent
29.	***Damage value, 1 % flood***	$1 billion to $2 billion	Range of dollar damage estimates (four counties reporting), $10 million-$17 billion. Average damage estimate, $4,787,500,000
30.	***Buildings at risk by type***		Range of buildings at risk, two agencies reporting, 1,750 to 160,000 homes, 400 to 5,000 businesses or other structures.
31.	***Cost to bring all areas to 1%***	$750 million to $1 billion	Range of estimated cost to prevent 1 percent flood, three agencies reporting, $274.4 million to $1.2 billion.
32.	***Capital priority process***	Priorities are based on a set of advisory committee- and Board of Directors-approved ranking criteria. The primary weighting factor is the amount of flood damage, in dollar value terms, that can be accomplished. Factors other flood protection are included in the ranking criteria.	4 of 8 agencies, 50 percent, reported using recommendations of advisory committees in prioritizing capital projects. 2 of 8 agencies, 25 percent, reported using some sort of point system to prioritize projects. Most elaborate is Orange County's process, where proposed projects are reviewed by a committee of city and county engineers.

	Agency	**SANTA CLARA VALLEY WATER DISTRICT**	**SUMMARY OF RESULTS, NOT INCLUDING SCVWD**
33.	***Capital mgt. & cost controls***	In addition to controls associated with the engineers' reports, project costs are identified in the Capital Improvement plan and District budget. The Board of Directors also approves individual projects on a case-by-case basis. All change orders must be approved, by the Board of Directors for changes in excess of $40,000, by the General Manager or his designee for lesser amounts. Board-approved change orders require a summary of costs and contingency fund expended to date.	None of the agencies reported any controls beyond what State contracting laws require.
34.	***Capital project reports***	Separate monthly status reports are prepared for the General Manager and the Board of Directors.	6 of 8 agencies, 75 percent, reported providing monthly written progress reports on capital projects. One agency, 12.5 percent, reported preparing quarterly progress reports.
35.	***Reporting of project changes***	Changes are reported through the chain of command, through the monthly status reports, and directly to the Board of directors through budget adjustments or change orders.	5 of 8 agencies, 62.5 percent reported project changes are reported on the monthly status reports. However, one agency noted the reports discuss only project schedules, not costs, which are managed on a project-by-project basis, without a formal reporting document. 2 of 8 agencies, 25 percent, said there is a separate process to notify upper management and agency directors of project changes. 1 agency has not process to report project changes.

	Agency	**SANTA CLARA VALLEY WATER DISTRICT**	**SUMMARY OF RESULTS, NOT INCLUDING SCVWD**
36.	***Non-capital flood management methods used***	While the District does not have land use approval authority, it does have the right to review land development proposals and to issue permits for all development and activities in or near creeks. It discourages development in the 1 percent flood plain unless the development meets Federal Emergency Management Administration standards. The District has a public awareness program to inform the public of flooding problems and flood safety. It also has a public education program in conjunction with local schools throughout the County in which it brings water management issues into classrooms.	7 of 8 agencies, 87.5 percent reported using review of land use as a non-capital flood management method. However, 1 of the 7, San Diego County, reported that its Flood Control District Advisory Committee is precluded from reviewing specific development projects. The most extensive limits appear to be in Santa Barbara County, which requires a 50-foot setback from creeks and 200 feet from rivers for development.
37.	***Project & program reporting to cities and other agencies***	The District has flood control advisory committees—one for each zone—that are composed of representatives from the cities and the County that are located in the respective zones. The District provides information to the committees, and the committees provide information to the District.	4 of 8 agencies, 50 percent, report periodic meetings with advisory groups including representatives of cities and other agencies. The other agencies report providing copies of District reports to agencies, or informally consulting them.

	Agency	**SANTA CLARA VALLEY WATER DISTRICT**	**SUMMARY OF RESULTS, NOT INCLUDING SCVWD**
38.	***Project & program reporting to general public***	The District has provided information to the public through its advisory committees, and through public meetings and public hearings on specific studies or projects. It has conducted neighborhood meetings and made presentations to various city councils. The District has also used mailers to people that live along creeks, and it has a public information program that strives to keep the media informed of the District's programs and projects. The District also has a new sign program to inform the public about the flood control and water supply facilities throughout the County.	6 of 8 agencies, 75 percent reported using community meetings and workshops to solicit input either on an annual or project-specific basis. 3 of the 6 indicated these occur through regularly scheduled committee meetings. The others reported ad hoc meetings as required by environmental review processes.
39.	***Special legislation***	The District Act provides the authority for local flood control funding. The County of Santa Clara and all cities also operate under FEMA requirements, prohibiting development in floodways and requiring new development to be protected from the 1 percent flood.	1 of 8 agencies, 12.5 percent, reported special local legislation addressing flood control, beyond what State and federal laws require.
40.	***FEMA community rating system***	Some cities in Santa Clara County have pursued the Community Ratings System to Reduce insurance rates. The City of Milpitas has been most successful, with a flood insurance rate reduction of 20 percent.	4 of 8 agencies, 50 percent reported participating in the program.

APPENDIX III

DETAILED SURVEY RESULTS

Riverside County, Santa Barbara County
and San Diego County .... pages 1 - 6

Orange County, San Bernardino County
and Ventura County .... pages 7 - 14

Los Angeles County and Sacramento Area
Flood Control Agency .... pages 15 - 25

	Agency	**Riverside County Flood Control and Water Conservation District**	**Santa Barbara County Flood Control & Water Conservation Dist.**	**San Diego County Flood Control District**
1.	***Square miles of district***	2,700	23,000	3,622
2.	***Square miles drainage***	N/A	No total. Ranges from less than 1 mile to more than 1,700 miles	unknown
3a.	***Miles of channels improved/unimproved***	Improved—190 Unimproved—5	300 total.	13.4 miles open channel. 45.9 miles culvert. .5 miles other 1,594 facilities
3b.	***Miles improved since 1980 and percentage of total***	47.5 or ± 25percent	less than five miles, or 1.67 percent	unknown
3c.	***Dams operated***	16 State jurisdictional, 24 detention basins or smaller dams	30 debris dams and basins.	none
4.	***Mission or goals***	Protect people and property from flooding through responsible and efficient stormwater management	For Water Resources Division, which includes flood control and water supply—"To provide flood protection, water conservation and promote an adequate water supply for the residents of Santa Barbara County."	1. Provide citizens in the unincorporated area protection from flooding hazards. 2. Service citizens through customer service functions. 3. Improve environmental conditions.
5.	***Agency environmental policy or guidance?***	Habitat conservation plan for federally endangered Stephen's Kangaroo rat.	Program EIR adopted.	County resource protection ordinance which includes definitions of floodway, floodway fringe, floodplain, fill, mature riparian woodland, riparian habitat, wetland and requiring all feasible mitigation measures and determination of no less damaging alternatives, and measures to result in net gain of wetland/riparian habitat.

	Agency	Riverside County Flood Control and Water Conservation District	Santa Barbara County Flood Control & Water Conservation Dist.	San Diego County Flood Control District
6.	***Maintenance level policy***	Dictated by State or federal regulations. More selective equipment selection now required based on effect on channel prism, which may mean a less thorough job.	To maintain historic levels of protection, which range from less than 10-year to more than 100-year protection, depending on facility.	Cleaned at least once a year, as necessary to maintain design capacity.
7.	***Use of herbicides or mechanized equipment***	Yes, subject to regulations., objective to control or remove vegetation, whether veg. control is selective.	Use both, but try to use herbicides to limit use of heavy equipment.	Used for weed abatement and arunda eradication
8.	***Maintenance of privately-owned creeks***	None	Yes, if access and permission are provided, and if there is a compelling regional benefit.	None
9.	***Acquire fee title or permanent easements to all private ROW***	No	No	No
10.	***Stream restoration, habitat enhancement***	No	No	Environmental guidelines from the EIR
11.	***Maintenance scheduling***	Scheduled through by computer program. Productivity evaluated by a work management system computer program comparing programmed and reported accomplishments.	An annual maintenance plan is developed for Board of Directors approval. Currently developing performance measures to evaluate field staff.	Scheduled by road foremen. Productivity evaluated by review of maintenance standards
12.	***Benefit Assessment***	Yes, Elsinore Valley & NPDES by zone	Yes	No
13.	***Last voter authorized***	Elsinore, 1986; NPDES not voter authorized	1996	N/A
14.	***Expiration date***	Elsinore Valley, 2017; NPDES has no expiration date	None	N/A
15.	***Voter reauthorization***	Elsinore Valley, no; NPDES, no	N/A	N/A

	Agency	Riverside County Flood Control and Water Conservation District	Santa Barbara County Flood Control & Water Conservation Dist.	San Diego County Flood Control District
16a.	***Benefit Assessment rate***	Elsinore Valley, SFD, $34.66/acre, apt./MH 288/acre, comm/ind 384/acre; NPDES, $3.63 to $4/BAU	Ranges from $1.97 to $15.01 for SFD; $14.19 to $100.05 for commercial industrial	N/A
	BAU bases	BAU=SFD, 7,200' lot; commercial/industrial, 12 BAU/acre; apt, MH, churches, schools,9 BAU/acre	SFD and small multiple is based on 13,068-square-foot lot (0.3 acre). Comm./ind. min. is double resi. Comm./ind. per acre is 6.66x SFD. Inst./apts is 5x SFD.	N/A
16b.	***Benefit Assessment revenue***	Elsinore, $556,000; NPDES, $1,861,660	$1,957,000 for all zones	N/A
17.	***Average SFD combined property tax & assessment***	not provided	$0 to $15.37 per $100,000 taxable value. Average for all zones, not weighted, is $7.94 per $100,000.	N/A
18.	***BA adjustment method***	Elsinore adj. by yearly debt service on bonds; NPDES by program cost/BAUs	By CPI	N/A
19.	***Benefit Assessment uses***	Elsinore used to pay debt service on bonds used to finance capital projects in Lake Elsinore area, with some State reimbursement; NPDES used for costs of NPDES program, incl. pub. ed., water testing, permitting.	See District act	N/A

	Agency	**Riverside County Flood Control and Water Conservation District**	**Santa Barbara County Flood Control & Water Conservation Dist.**	**San Diego County Flood Control District**
20.	***Maintenance budgeting***	Conducted through work management computer program. New facilities are added to current facilities for budgeting as they come on line, with budgets adjusted accordingly.	Based on historical budget information and forecasted needs to the extent funds are available	Existing facilities are maintained based on a set of maintenance criteria by the Roads Division with payment from the flood control maintenance budget of about $300,000 annually, which is based on historical maintenance costs. There is a log of all facilities maintained. All facilities receive maintenance once or twice a year. New facilities are added to the maintenance budget based on an estimated maintenance cost per 100 foot of channel length or cost per culvert.
21.	***Multi-year capital plan***	First ever being drafted	under development	There is a five-year capital improvement plan, which has never been formally written down. A formal plan is now in the process of being prepared.

	Agency	Riverside County Flood Control and Water Conservation District	Santa Barbara County Flood Control & Water Conservation Dist.	San Diego County Flood Control District
22.	***Cost-benefit on local projects***	No	No	Flood control projects are prioritized by the Flood Control District Advisory Commission, comprised of seven members appointed by the Board of Supervisors, two members each from the two districts with the largest unincorporated area, one member from the other three. District staff recommends projects as part of the annual budget process which the commission endorses each April. There is no formal rating system now, although a point system has been used in the past.
23.	***Early 1990s revenue loss & how addressed***	Current revenue about 85% of FY 92-93 peak. Staff cuts via attrition, and reducing capital program to reflect revenues.	Loss of $600,000 Districtwide. Addressed through service reductions and employee layoffs	No
24.	***Permit fees for developers***	Encroachment permits only.	No	Grading and plan check permits.
25.	***Permit fees planned***	No	No	
26.	***Permit violation sanctions***	N/A	None	
27.	***Design protection standard***	interim facilities may be built with case-by-case hydraulic capacity. Local storm drains typically have 10-year flood design, with balance of 100-year flow carried in streets.	Based on available funding. Local stormdrains often designed for 10-year to 25-year events.	Areas over one square mile designed for 100-year storm. Smaller areas must carry 100-year flow in combination of storm drainage and overflow inside of right of way, or combination of storm drainage and street flow must carry 50-year storm
28.	***District percentage 1 % risk***	Area=60-75%; population, 25%	Not available	unknown
29.	***Damage value, 1 % flood***	$10 million-$100 million	1995 estimate—$100 million	unknown

	Agency	Riverside County Flood Control and Water Conservation District	Santa Barbara County Flood Control & Water Conservation Dist.	San Diego County Flood Control District
30.	***Buildings at risk by type***	unknown	Not available	1,750 one-to four-family structures, 400 structures other types
31.	***Cost to bring all areas to 1%***	$500 million-$1 billion	Not available	unknown
32.	***Capital priority process***	Board-appointed commissioners hold yearly public hearings and make recommendations to BOS for final approval. Typically based solely on flood protection unless there are joint use and joint funding	Prioritized by need, funding, grants, etc. Projects in excess of $25,000 are approved by BOS.	Established by project planning committee.
33.	***Capital mgt. & cost controls***	No	No	BOS approves construction contracts
34.	***Capital project reports***	Quarterly internal progress reports, with annual District report prepared for District and other officials. Internal monthly status meetings now being replaced by "LIVE" connections for all management staff.	Currently under development	Monthly written reports to flood control district advisory committee by staff
35.	***Reporting of project changes***	See previous	None	See previous
36.	***Non-capital flood management methods used***	Flood plain management ordinance adopted in 1980. All permits within FEMA flood plain reviewed by District, which also reviews and recommends conditions on all other land use cases.	1. No floodway encroachment. 2. Two foot elevation above basic flood elevation. 3. 50 foot setback from creeks. 4. 200 foot setback from rivers.	Floodplain mapping Land use controls Elevation of structures Public education & seminars
37.	***Project & program reporting to cities and other agencies***	District annual report & and annual CAFR	Monthly Public Works Coordination Meetings with city public works departments, and regular staff contact	Project planning committee & technical advisory committee, news releases and bid advertisements

	Agency	**Riverside County Flood Control and Water Conservation District**	**Santa Barbara County Flood Control & Water Conservation Dist.**	**San Diego County Flood Control District**
38.	***Project & program reporting to general public***	Public hearings held annually in communities	Workshop for the public to provide input on specific projects or programs.	Advisory committee meetings, CEQA advertising and community planning group meetings
39.	***Special legislation***	District act on flood control funding & public input	None	Flood damage prevention ordinance requiring development permits and specific development standards in floodplain areas, design & procedure manual, land development may not increase downstream runoff. There is also a watercourse ordinance regulating construction activity around watercourses
40.	***FEMA community rating system***	No	Yes	No

	Agency	**Orange County Flood Control District**	**San Bernardino County Flood Control District**	**Ventura County Flood Control District**
1.	***Square miles of district***	798	20,189	1,830 square miles
2.	***Square miles drainage***	3053	20,000	2,170 square miles
3a.	***Miles of channels improved/unimproved***	330 miles improved	Improved, 100. Unimproved, 170	931 miles under District jurisdiction. Improved, approx. 190 miles
3b.	***Miles improved since 1980***	25, or 7.58 percent	51, or 51 percent	unknown
3c.	***Dams operated***	12	12	32
4.	***Mission or goals***	To provide, operate and maintain quality public facilities and regional resources for the enjoyment, mobility, protection and business of the people of the County of Orange.	To provide for the control of the flood and storm waters of the District. To provide for the control of flood and storm waters of streams that have their source outside of said District but which flow into District. To conserve such waters for beneficial use by spreading, storing, retaining and causing to percolate into the soil without or without District. To save or conserve in any matter all or any of such waters. To protect from such flood or storm water the watercourses, watersheds, public highways, life and property in said District. To prevent waste of water or diminution of the water supply in District. To prevent exportation of water from the District. To obtain, retain and reclaim drainage, storm, flood and other waters for beneficial use in the District.	To provide for the control and conservation of flood and storm waters, and for the protection of water courses, watersheds, public highways, life and property in said district from damage or destruction from such waters; to prevent the waste of water or the diminution of the water supply, or the exportation of water from said district, and to import water into said district and to obtain, retain and reclaim drainage, storm, flood and other waters and to save and conserve all or any of such waters for beneficial use in said district.

	Agency	Orange County Flood Control District	San Bernardino County Flood Control District	Ventura County Flood Control District
5.	***Agency environmental policy or guidance?***	Floodplain management as a goal in natural water courses and specific plans are adopted as development guides in selected watersheds (e.g. Aliso Creek).	The San Bernardino County Flood Control District has not adopted a local environmental policy, but rather utilizes the regulations and guidelines of CEQA and NEPA.	No
6.	***Maintenance level policy***	Improved concrete and earthen channels, clean and remove (or spray with herbicides) all vegetation one or two times a year. Unimproved channels, try to obtain a clear flow area approximately 20 feet wide down the center of the channel. Natural channels—none.	Channels that have traditionally received priority are ones that have been the historical trouble spots. Operations personnel identify those on a year-to-year basis.	District does not maintain unimproved channels or natural creeks. District maintains District facilities where we have ownership responsibility to maintain maximum runoff capacity.
7.	***Use of herbicides or mechanized equipment***	Spray and clean improved channel one or two times a year.	Yes, if we have the appropriate permits (i.e. Fish & Game, Army Corps of Engineers, etc.)	Yes, based on DFG agreements, label recommendations for herbicides, State admin. recommendations, management work calendar and field conditions.
8.	***Maintenance of privately-owned creeks***	All privately-owned water courses are maintained by the owner. There are no public maintenance responsibilities.	We do not maintain them.	District does not maintain privately-owned creeks. District policy requires District to have right-of-way before it can maintain.
9.	***Acquire fee title or permanent easements to all private ROW***	No	Only in creeks considered to be "regional" facilities, carrying 750 cfs or draining 500 acres or more of watershed.	Only if improved to District standards.

	Agency	Orange County Flood Control District	San Bernardino County Flood Control District	Ventura County Flood Control District
10.	***Stream restoration, habitat enhancement***	Selected watersheds or water courses identified as open space or recreation corridors have restoration or habitat enhancement goals (Aliso Creek and San Juan Creek studies).	The San Bernardino County Flood Control District does not have a policy concerning stream restoration. Rather, if a District project alters a stream, the CDFG will require restoration per their regulations. Habitat enhancement is done through elimination of non-native plants growing in water courses.	No
11.	***Maintenance scheduling***	The entire flood control system is routinely inspected a minimum of twice a year. Weather will cause variances. Maintenance inspection reports are submitted by inspectors and scheduled by priority. Productivity of maintenance staff is measured via a maintenance management software system with established units of measure.	On an as-needed basis. An annual facilities status report is prepared before each storm season.	The District operates under a maintenance management program. Work is scheduled and performed in accordance with tools provided by the Work Management system via Division management. Work is evaluated by job, monthly and yearly basis to better prepare the next Work Management System calendar and activities budget.
12.	***Benefit Assessment***	No	No	Yes
13.	***Last voter authorized***	N/A	N/A	Does not require voter authorization.
14.	***Expiration date***	N/A	N/A	N/A
15.	***Voter reauthorization***	N/A	Our assessment program was canceled by the Board of Supervisors action several years ago.	NA
16a.	***Benefit Assessment rate***	N/A	N/A	Varies by zone and by city. Average rate varies from $13.50 to $36.66 per Basic Assessment Unit.

	Agency	Orange County Flood Control District	San Bernardino County Flood Control District	Ventura County Flood Control District
	BAU bases	N/A	N/A	BAU is based on a single family tract home on an 8,712-square-foot lot, 40 percent of which is covered with impervious surfaces. Conversions for other development types include: comm/ind, 11 BAUs/acre condos, 9 BAUs/acre golf courses 2.5 BAUs/acre vacant land, .125 BAU/acre agriculture, .2375 BAU/acre.
16b.	***Benefit Assessment revenue***	N/A	N/A	$10,037,646 for all zones
17.	***Average SFD combined property tax & assessment***	Maximum 2 percent of assessed value.	Unknown	unknown
18.	***BA adjustment method***	N/A	N/A	Prior to Prop. 218, assessments were adjusted annually based on need. As a result of 218, assessments have been frozen.
19.	***Benefit Assessment uses***	Public hearings, notices and voting of residents is required.	N/A	None exist, although to date benefit assessment revenues have been used only for operations and maintenance and the NPDES program.
20.	***Maintenance budgeting***	Budget is based mainly on a maintenance management system and to some degree on historical projections.	Our Operations Division estimates the cost based on past expenditures while taking into account any special maintenance concerns.	Via Work Management System
21.	***Multi-year capital plan***	Yes. Five-year plan updated annually.	Yes. 10-year plan.	Yes. Five-year plan updated annually.

	Agency	**Orange County Flood Control District**	**San Bernardino County Flood Control District**	**Ventura County Flood Control District**
22.	***Cost-benefit on local projects***	No	Yes. Generally, several alternatives are evaluated for each project. Some of the criteria used include public safety (which alternative provides most security), maintenance cost, construction cost, service life, environmental impacts and available funding.	No
23.	***Early 1990s revenue loss & how addressed***	Tax reductions were experienced due to tax diversion to the State in 1993 and $4 million per year beginning in July 1997 by special legislation to help pay for County bankruptcy.	With the decline of property values, homes were reassessed and the District did see a reduction in revenues. Capital expenditures were reduced.	No
24.	***Permit fees for developers***	Yes, $250,000	The District does not issue permits nor charge permit fees for developments outside of District right-of-way. When District right-of-way or a District facility is physically impacted by a construction project, generally a permit from the District is required along with the applicable filing and inspection fees.	Yes. Current fees are $2,288 per acre, or $572 per single family dwelling. However, under District act fees may be increased to a maximum of $2,400 per acre. Fee is applied to all developers Districtwide.
25.	***Permit fees planned***	N/A	N/A	N/A

	Agency	Orange County Flood Control District	San Bernardino County Flood Control District	Ventura County Flood Control District
26.	***Permit violation sanctions***	Issue a notice to stop work by County enforcement officers. If work continues, legal action will be instituted.	The District's permit section is not set up to issue citations or impose any kind of sanctions. Illegal encroachments are handled on a case-by-case basis. Generally, we enter into dialogue with the perpetrator aimed at obtaining the necessary plans for District review and permit issuance. We have had instances when the encroachments are simply unacceptable and had to be removed by District forces or the perpetrator.	N/A
27.	***Design protection standard***	Generally, regional and subregional facilities are designed for 100-year events. 100-year protection is a District goal to meet, where feasible. However, the 1996-97 plan does include some subregional projects at less than 100-year protection.	No	District criteria is to design for a 50-year storm, plus appropriate freeboard, which is usually more conservative than the 100-year storm. However, all designs are reviewed to ensure that the 100-year level is met.
28.	***District percentage 1 % risk***	unknown	unknown	unknown
29.	***Damage value, 1 % flood***	Damage not known, but countywide estimated flood control deficiency is $1.2 billion.	unknown	unknown
30.	***Buildings at risk by type***	N/A	unknown	unknown
31.	***Cost to bring all areas to 1%***	$1.2 billion	unknown	unknown

	Agency	Orange County Flood Control District	San Bernardino County Flood Control District	Ventura County Flood Control District
32.	***Capital priority process***	The Orange County Flood Control District program is formulated with the assistance of the City Engineers Flood Control Advisory Committee, comprised of one city engineer from each supervisory district, and an Orange County Flood Control representative designated by public works. Proposals from cities, divisions and communities are analyzed by Flood Program Division Staff and submitted to the committee for project recommendations and priorities, based on a point system. The recommendations are used in preparing the annual Orange County Flood Control District budget. Projects have 100-year design, drain 500 or more acres. Point criteria are relieving existing flooding, relieving potential flooding, remedy high maintenance situations & close gaps in existing facilities. Extra points for local funding and having approved project reports, plans and specs. Locally-owned projects can be built by District, but must conform to District design and maintenance standards, encroachment free ROW and some city funding.	Staff approval, with consultation from zone advisory committees that include local citizens, government officials, city engineers, etc., in order to get public input.	Criteria is to address flood-prone areas. Currently the emphasis is on addressing deficient District-owned facilities by enlarging them or constructing upstream detention facilities.

	Agency	**Orange County Flood Control District**	**San Bernardino County Flood Control District**	**Ventura County Flood Control District**
33.	***Capital mgt. & cost controls***	None other than the Government code.	Only documentation provided was information on duties of District divisions. It indicates that project programming/management is the responsibility of the Flood Control Planning Division, which administers a work order system and prepares project schedules and progress reports, while also conducting planning, feasibility, alignment analysis and cost effectiveness studies.	No
34.	***Capital project reports***	Monthly status reports from Design and Construction Divisions are sent to the Manager and Deputy Director. Additionally, monthly status update meetings are held with the Design Division for progress reports and program resolution.	Monthly project status report.	The Board of Supervisors is informed of progress when they take specific actions pertaining to a project. These milestones may be a) annual adoption of five-year plan; b) approval of CEQA action on project; c) approval of ROW acquisition; or d) award of construction contract. The Board and engineer-manager also receive a monthly project report.
35.	***Reporting of project changes***	Status meetings/Project schedules	See attached.	monthly project report

	Agency	Orange County Flood Control District	San Bernardino County Flood Control District	Ventura County Flood Control District
36.	***Non-capital flood management methods used***	Specific plans for use in development along water courses are used to assist in making land use decisions along water courses. Land use decisions are enforced through code ordinances and permit processing to ensure compliance with FEMA's floodplain management requirements.	None.	District comments on all development in the cities and in unincorporated areas. Watercourse permits are required for all activities on streams under the District's jurisdiction. Encroachment permits are required for activities on District right-of-way.
37.	***Project & program reporting to cities and other agencies***	Program book for each fiscal year is distributed to all cities.	Zone Advisory Committee public meetings. State clearinghouse news on environmental permits	All cities are consulted annually when the CIP is developed.
38.	***Project & program reporting to general public***	Through City Engineers Flood Control Advisory Committee	Project information is released to the public through the Corps of Engineers Notification process. CEQA notification is done through the procedures specified in the CEQA guidelines.	CEQA review and special public meetings for controversial projects.
39.	***Special legislation***	Floodplain designations provided for in the subdivision map process identify the area in a floodplain and set the limits of encroachments in floodplains through the floodplain ordinances.	None	No
40.	***FEMA community rating system***	Yes. Orange County has secured Class 8 designation.	No	No. FEMA's community rating system is administered by the County and individual cities.

	Agency	**Los Angeles County Flood Control District**	**Sacramento Area Flood Control Agency**
1.	***Square miles of district***	2,760 miles	302.82 square miles
2.	***Square miles drainage***	unknown	American River Watershed drains an area of about 2,100 square miles.
3a.	***Miles of channels improved/unimproved***	Improved: 446 miles Unimproved: 4 miles	Improved: 200+ miles Unimproved: unknown
3b.	***Miles improved since 1980***	Approximately 350 miles of storm drains, but only 5 percent of channels, or 22.3 miles.	33 miles of levees improved as of 1993. 75 miles proposed in 1996 for improvement over the next five years. 16.5 percent
3c.	***Dams operated***	15	Agreement with U.S. Bureau of Reclamation for operation of Folsom Dam and Reservoir.
4.	***Mission or goals***	To provide flood protection for the property owners and residents of the Los Angeles County Flood Control District, and to conserve storm and/or waste water whenever possible.	SAFCA's long-term goal is to provide the Sacramento region with as much flood protection as is appropriate for a heavily populated urban area, much of which is subject to significant inundation in the event of an uncontrolled flood. SAFCA's policy is to provide at least 200-year flood protection to all urban areas.
5.	***Agency environmental policy or guidance?***	Our Board of Supervisors adopted Environmental Document Reporting Procedures and Guidelines on Nov. 17, 1987. These guidelines are followed in conjunction with State and federal regulations. Balancing project cost versus environmental factors is based on judgment.	No

	Agency	**Los Angeles County Flood Control District**	**Sacramento Area Flood Control Agency**
6.	***Maintenance level policy***	Since at least 1979, the District has had maintenance standards for improved channels and underground storm drains. Standards specify a preferred Maintenance Standard, and a minimum Acceptable Maintenance Condition. For example, the minimum standard for obstructions in unlined or soft bottom channels and storm drains is debris blocking more than 20 percent of channel height. The preferred standard is maximum capacity. These standards help determine when extraordinary maintenance is needed. Controlling growth of vegetation in earth-bottom channels is becoming increasingly difficult because of various laws and regulations designed to protect the environment.	Not an O & M responsibility, as levees are maintained by existing flood control agencies. SAFCA will soon be signing agreements with the State to maintain floodways. Policies or guidelines for this have as yet been developed.
7.	***Use of herbicides or mechanized equipment***	Both herbicides and mechanized equipment are used to control weed growth on our right-of-ways. In the past, herbicide usage within channels has been minimal.	N/A
8.	***Maintenance of privately-owned creeks***	We do not maintain privately-owned creeks. Such facilities are maintained by the property owner.	N/A
9.	***Acquire fee title or permanent easements to all private ROW***	No	Yes, within areas protected or impacted by projects.

	Agency	Los Angeles County Flood Control District	Sacramento Area Flood Control Agency
10.	***Stream restoration, habitat enhancement***	No specific policy, due to urbanization and lack of land adjacent to channels, other than meeting regulatory requirements. However, we are working with various State and federal agencies and private developers on a Natural River Management Plan for the Santa Clara River in Los Angeles County. Also, our Board adopted the Los Angeles River Master Plan on June 13, 1996 to enhance the open spaces along this particular river. Master Plan identifies potential aesthetic improvements such as tree planting, development of bike and pedestrian trails, economic development, water conservation and environmental quality along the river banks.	The SAFCA Act allows participation in environmental enhancement and/or restoration. The pro-active policy is to incorporate enhancement into projects. We have combined borrow activities with environmental restoration at several locations.
11.	***Maintenance scheduling***	Routine maintenance is generated by computer-generated job orders in accordance with a predetermined schedule. Resources for each job order have been estimated. Non-routine work is authorized by separate job order for each item of work identified. The need for non-routine work is established by facilities that fall below the Acceptable Maintenance Condition, prior to regularly scheduled maintenance. Resource estimates are prepared as desired. A new computerized system is being implemented which will provide greater capability to measure productivity and control costs.	N/A
12.	***Benefit Assessment***	Yes. Established Aug. 14, 1979 for 1979-80 fiscal year.	Two, North Area Local Project Capital Assessment No. 2 & Maintenance Assessment No. 1.

	Agency	**Los Angeles County Flood Control District**	**Sacramento Area Flood Control Agency**
13.	***Last voter authorized***	Authorized by voters as Proposition A on Nov. 9, 1979, as required by State law. Voter question authorized the Board of Supervisors to levy benefit assessments for any succeeding fiscal year.	No general election was required. The SAFCA Act, as approved in 1990, gives the District authority to levy and collect assessments as allowed under Sec. 51320 of the California Water Code, which provides for assessments levied by reclamation districts. Assessments were approved after public notice and public hearings were held.
14.	***Expiration date***	Annual approval by the Board of Supervisors.	North Area Local Project Capital Assessment District expires in 2025. Operations and Maintenance Assessment District No. 1 reauthorized annually by Board of Directors.
15.	***Voter reauthorization***	Voter approval is not required unless the current benefit assessment rates are proposed to be increased as specified in recently enacted Proposition 218.	The Board of Directors annually approves the O & M assessment role.
16a.	***Benefit Assessment rate***	Based on $28.85 x acreage x runoff 0.0637 in Zone 1 or Based on $5.95 x acreage x runoff 0.0637 in Zone 2	O & M Assessment District calculated by relative land value per acre assigned by an appraiser based on land use, the parcel area in percentage of an acre, a benefit factor determined by whether the parcel is wet, dry or crosses the floodplain, using COE floodplain maps, times the current assessment rate of .0006534. North Area based on parcel area, times a multiplier based on land use, plus an amount based on building footprint times a multiplier based on use, for high density residential/commercial uses, plus a constant minimum assessment based on land use.

	Agency	Los Angeles County Flood Control District	Sacramento Area Flood Control Agency
	BAU bases	Base factor is residential lot on 14,187 square feet. Condos approx. double the base, as are office buildings and manufacturing. Shopping centers are 2.29 and 2.33 times single family residential.	
16b.	***Benefit Assessment revenue***	Estimated 1997-98 revenue is $107 million.	O & M Assessment Revenue: $6 million. Revenue from North Area Local Project collected by the tax collector and transferred directly to the treasurer to pay bond debt for project. 1997-98 revenue is estimated to be $2.9 million.
17.	***Average SFD combined property tax & assessment***	In each zone a homeowner will pay $14.20 a year as the District's share of property taxes, and an additional $2.99 in property taxes for District-related debt service. The Zone 1 benefit assessment is $28.85, Zone 2 is $5.95. These figures are based on a single family parcel valued at $100,000 in 1979 and inflated 2 percent annually since then.	Estimated at $30 to $40 per year in the wet zone and $4 to $5 per year in the dry zone for the O & M assessment.
18.	***BA adjustment method***	Prior to Proposition 218, the yearly assessment was based on projected yearly needs and other available revenue sources. However, any future rate increase will require voter approval under Prop. 218.	No adjustments are necessary in the capital assessment, which is for a specific project. O & M assessment rates are set annually by the SAFCA Board of Directors.

	Agency	Los Angeles County Flood Control District	Sacramento Area Flood Control Agency
19.	***Benefit Assessment uses***	The revenue can be used for any flood control purpose, including operation, maintenance and construction of flood control facilities and emergency response to flood damage. Water conservation activities are not an eligible use of LACFCD Benefit Assessment revenue.	Under the SAFCA Act, assessment revenues may be used for operation and maintenance of projects, project liabilities, administrative costs, for a fund to advance the cost of agency projects. The District is also authorized to maintain a general reserve fund not exceeding 25 percent of its total annual appropriations, for emergencies, replacements or other lawful purposes.
20.	***Maintenance budgeting***	Budgets are prepared based upon resources required to maintain facilities, primarily by Department staff, with contractors in some instances. New facilities are designed to minimize maintenance, but projections of maintenance costs are not performed on a facility-by-facility basis.	No specifics provided, other than language indicating that the District has the authority to maintain facilities it constructs or acquires, using O & M assessment revenue.
21.	***Multi-year capital plan***	Yes, a five-year construction program.	Yes, a five-year work plan.
22.	***Cost-benefit on local projects***	We do not prepare formal cost benefit analyses for locally-funded projects. Projects are evaluated with a rating system and assigned a relative priority based on public and agency support, severity of flooding conditions and other considerations, such as elimination of Flood Zone A designation.	To date, SAFCA's projects have all been tied to federal flood control projects; therefore, cost-benefit analyses are done using the Corps of Engineers' guidelines.
23.	***Early 1990s revenue loss & how addressed***	In 1992-93, the District lost approximately $8.5 million due to the property tax shift to the schools. These funds were recovered in 1993-94 through legislation relieving the District of requirements to contribute to Special District Augmentation Funds.	No

	Agency	Los Angeles County Flood Control District	Sacramento Area Flood Control Agency
24.	***Permit fees for developers***	Yes. Grading and Landscape Permit and Plan Check Fees. Based on the volume of material scheduled to be moved or area scheduled to be landscaped. Estimated annual revenue from these fees is $21.4 million. Other sources of permit fees are described in the County Building Code.	SAFCA has a Capital Investment Equalization Fee which is charged to new development within areas where a flood control project has been built and an assessment district formed to fund the improvements. The purpose of the fee is to equalize payments between existing and new development proportional to the benefit received.
25.	***Permit fees planned***		
26.	***Permit violation sanctions***	Sanctions and improvement provisions are described in the Los Angeles County Uniform Building Code.	N/A
27.	***Design protection standard***	For rural areas, 10-year level of flood protection provided. For urban areas. 25-year level of flood protection provided. For major facilities, including reservoirs, detention basins, culverts, etc. a 50-year level of protection is provided. This level of protection is defined as capital flood. Level of protection is based on rainfall frequency analysis, with capital flood levels adjusted upward for burning and bulking effects in areas where drainage tributaries to major facilities are subject to brush fires.	Board policy minimum is 200-year protection in urban areas, modified based on cost-benefit ratios, ability of assesses to pay for projects, residual risk and consequences of a greater than 1 percent flood, such as potential loss of life, regional economic impacts, etc.
28.	***District percentage 1 % risk***	Approximately 5 percent of the District (approximately 138 square miles) is mapped as being at risk during a 1 percent flood. This area has been reduced by about 25 percent (approximately 34.5 square miles) since 1980, due to city annexations and flood control facility construction.	Currently 172 miles could be flooded to depths of up to 15 feet in a major flood.

	Agency	Los Angeles County Flood Control District	Sacramento Area Flood Control Agency
29.	***Damage value, 1 % flood***	Damages from overflow of the lower Los Angeles River alone during a 1 percent flood are estimated to be more than $2 billion. No estimates are available for the remainder of the County.	$17 billion
30.	***Buildings at risk by type***	No attempt to quantify, but estimate thousands of buildings are at risk.	160,000 homes, 5,000 businesses, 117 schools
31.	***Cost to bring all areas to 1%***	Unknown	$274.4 million in seven different projects.
32.	***Capital priority process***	Point system reflecting community and political support for project, severity of existing flooding conditions, written commitments for project funding and other criteria. In addition, recreation and water recharge are considered as additional benefits of flood protection projects, and emphasis is being increased on developing multi-use facilities.	Project priorities were established in a 1992 report on measures needed to provide flood control for Sacramento, and the current five-year work plan identifies all projects under the 1992 recommendations which SAFCA has authority to undertake. Although no specific criteria is identified, the five-year plan notes that the North Area Local Project, the top priority project, will lift development restrictions and flood insurance costs in the area it protects.
33.	***Capital mgt. & cost controls***		The Board of Directors approves the annual budget, according to the District's independently audited financial statements.

	Agency	Los Angeles County Flood Control District	Sacramento Area Flood Control Agency
34.	***Capital project reports***	District managers receive a monthly status report containing data on how much money the contractor has earned to date, the percentage of contract dollars earned, and the percentage of contract time used. This report also contains information on total bid price, required completion date, name of contractor, project location and funding source. The Board of Supervisors receives little information on projects during construction if things are going well. The Board approves contract advertisements, awards and acceptances, and any change orders in excess of $10,000.	Formal staff reports are prepared for the Board of Directors monthly meetings. These reports include both information items as well as policy matters.
35.	***Reporting of project changes***	Potential changes are immediately reported by the project inspector to the Area Supervisor, who relays the information to upper management within 24 hours. Approval of changes in scope and cost of less than $10,000 have been delegated to the Director of Public Works. Changes exceeding $10,000 are normally forwarded to the Board of Supervisors for approval within 5 to 12 days of identification.	The Executive Director is notified by a project manager or the Director of Administration. The Board of Directors is notified by the Executive Director.
36.	***Non-capital flood management methods used***	We provide input on land use decisions, mapping, elevation of structures, public education programs and enforcement of anti-dumping ordinances for our floodplain management program.	Comprehensive flood management plan, City of Sacramento, reservoir operations, purchase of flood prone land and structures, purchase of easements and input on local government development guidelines and policies.
37.	***Project & program reporting to cities and other agencies***	The District sends an annual letter to all the cities in the County requesting a priority listing of their drainage needs.	Staff-level meetings are held bimonthly with the City and County of Sacramento and the two flood control districts which are SAFCA members.

	Agency	**Los Angeles County Flood Control District**	**Sacramento Area Flood Control Agency**
38.	***Project & program reporting to general public***	We work closely with the more than 80 incorporated cities of Los Angeles County to assess public opinion regarding proposed projects. The public is also given the opportunity to review environmental documents prepared for projects which require them. Public meetings are frequently held during the planning and design stages of new projects.	Special community advisory committees on specific projects, newsletters on District activities, participation in community events, SAFCA web site now under development.
39.	***Special legislation***	No, but past land use decisions have had a major impact on the type of flood control facilities constructed. Most are in urbanized areas and are concrete channels or underground drains.	State Water Code as it applies to State designated floodways and project levees under State Reclamation Board jurisdiction.
40.	***FEMA community rating system***	Yes. Public Information Program and activities including mapping and regulations, a Flood Damage Reduction Program and a Flood Preparedness Program. Flood insurance rate reduction: 10 percent.	Yes, in a support/coordination role to City of Sacramento and Sacramento County.